

Catalog 212 2001

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— See page 53





GORDOS®



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– See page 4



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OMRON Relays

G2R Power PCB Relays



2







G2R-14 Series

G2R-1S Series

G2R-1T Series

G2R-24 Series

Contact material: AgCdO
 Contact voltage: 250VAC/30VDC

Operating frequency: 18,000 operations/hour (mechanical);

1,800 operations/hour (electrical; under rated load)

Power consumption: Approx. 530mW (non-loading DC coil);
 Approx. 0.9 mW (non-loading AC coil)

• Service life: 10,000,000 operations (min) (AC); 20,000,000 operations (min) (DC)

• Insulation resistance: 1,000M Ω (min. @ 500VDC)

• Dimensions: 1.40"L x 0.51"W x 1.00"H

G2R-14 series: SPDT Sealed GR2-1A-E series: SPST-NO Semi-sealed G2R-1-E series: SPDT Semi-sealed G2R-1-S series: SPDT Plug-in Q2R-1-T series: SPDT Quick connect Dimensions: 1.77"L x 0.55"W x 1.16"H G2R-24 series: DPDT Sealed G2R-2-S series: DPDT Plug-in

02K-24	series. DEDI	Seale	u GZN	-2-3 3611	es. • i	וטיוט	Flug	-111	
Part	Product	Coil	Coil	Contact			Pricing		
Number	Number	Volt.	Res. Ω	Current	Pin	1	25	50	
	No	on Latc	hing 1 P	ole - PCB	Type	!			
186685	G2R-1A-E-DC12	12	275	16A	6	\$3.39	\$2.95	\$2.75	
186693	G2R-1A-E-DC24	24	1100	16A	6	3.39	2.95	2.75	
186669	G2R-14 DC12	12	275	10A	5	3.39	2.95	2.75	
186677	86677 G2R-14 DC24		1100	10A	5	3.39	2.95	2.75	
186706	G2R-1-E-AC120	120	6500	16A	8	6.95	6.25	5.59	
186714	G2R-1-E-DC12	12	275	16A	8	3.49	3.15	2.79	
186722	GR2-1-E-DC24	24	1100	16A	8	3.49	3.15	2.79	
Non-Latching 1 Pole - Plug-In/ Quick-Connect Type									
184436	G2R-1-S-DC12	12	275	10A	5	\$4.79	\$4.29	\$3.89	
184444	G2R-1-S-DC24	24	1100	10A	5	4.79	4.29	3.89	
186749	G2R-1-S-AC24	24	260	10A	5	6.49	5.85	5.25	
186731	G2R-1-S-AC120	120	6500	10A	5	7.49	6.75	5.95	
186773	G2R-1-T-DC24	24	1100	10A	5	4.89	4.39	3.95	
186765	G2R-1-T-AC24	24	6500	10A	5	6.79	6.09	5.49	
186757	G2R-1-T-AC120	120	260	10A	5	7.49	6.75	5.95	
	No	on-Late	hing 2 P	ole - PCB	Туре)			
186811	G2R-24-DC12	12	275	5A	8	\$3.95	\$3.55	\$3.19	
186781	G2R-24-DC24	24	1100	5A	8	3.95	3.55	3.19	
186802	G2R-24-AC24	24	260	5A	8	6.49	5.85	5.25	
186790	G2R-24-AC120	120	6590	5A	8	7.49	6.75	5.95	
	Non-Latchir	ng 2 Po	le - Plug	-In/ Quicl	k-Con	nect Typ	е		
186845	G2R-2-S-DC12	12	275	5A	8	\$5.95	\$5.35	\$4.79	
186853	G2R-2-S-DC24	24	1100	5A	8	5.95	5.35	4.79	
186837	G2R-2-S-AC24	24	260	5A	8	7.19	6.49	5.79	

G5LE PCB Relays

7.95

187135

7.15

6500

· Subminiature "sugar cube" relay

· Contact ratings of 10A

186829 G2R-2-S-AC120

• Contact voltage: 120VAC/30VDC

· Contact current: 10A/8A

- Withstands impulses of up to 4,500V $\,$ - UL class-B insulation certified

120

• Dimensions: 0.89"L x 0.75"W x 0.65"H

G5LE-1/G5LE-1A series: Flux seal G5LE-14/G5LE-1A4 series: Plastic seal

Part	Product	Contact	Coil	Coil			Pricing	
Number	Number	Form	Volt.	Res. Ω	Pin	1	25	50
187151	G5LE-1 DC5	SPDT	5	63	5	\$1.95	\$1.75	\$1.55
187135	G5LE-1 DC12	SPDT	12	360	5	1.95	1.75	1.55
187143	G5LE-1 DC24	SPDT	24	1440	5	1.95	1.75	1.55
187186	G5LE-14 DC5	SPST	5	63	3	1.95	1.75	1.55
187160	G5LE-14 DC12	SPDT	12	360	5	1.95	1.75	1.55
187178	G5LE-14 DC24	SPDT	24	1440	5	1.95	1.75	1.55
187194	G5LE-1A DC12	SPST-NO	12	360	3	1.79	1.59	1.49
187207	G5LE-1A DC24	SPST-NO	24	1440	3	1.79	1.59	1.49
187215	G5LE-1A4 DC12	SPST-NO	12	360	3	1.95	1.75	1.55
187223	G5LE-1A4 DC24	SPST-NO	24	1440	3	1.79	1.59	1.49

G2RL Power PCB Relays

186888

• Contact voltage: 250VAC /24VDC

· Enclosure rating: fully sealed

Max operating frequency:

18,000 operations/hour (mechanical)

1,800 operations/hour @ rated load (electrical)

• Insulation resistance: 1,000M Ω min. @ 500VDC

• Life expectancy: 20,000,000 operations @ 18,00 operations/hour (mechanical)

• Dimensions: 1.30"L x 0.50"W x 0.61"H

· Power consumption: approx. 400mw

G2RL-14-CF series: SPDT General Purpose GRL2-14 series: SPDT · General Purpose G2RL-14-E series: SPDT High Capacity G2RL-14-E-CF series: • SPDT · High Capacity G2RL-24-CF series: · High Capacity SPDT G2RL-24 series: DPDT General Purpose

Part	Product	Coil	Coil	Contact			Pricing	
Number	Number	Volt.	Res. Ω	Current	Pin	1	25	50
	Non	Latch	ing 1 Po	ole - PCB	Туре			
186888	G2RL-14-CF DC12	12	360	12A	5	\$3.59	\$3.25	\$2.89
186896	G2RL-14-CF DC24	24	1440	12A	5	3.59	3.25	2.89
186861	GR2L-14 DC12	12	360	12A	5	3.49	3.15	2.79
186870	GR2L-14 DC24	24	1440	12A	5	3.49	3.15	2.79
186909	G2RL-14-E DC12	12	360	12A	8	4.19	3.79	3.39
186917	G2RL-14-E DC24	24	1140	12A	8	4.09	3.69	3.29
186925	G2RL-14-E-CF DC12	12	360	12A	8	4.35	3.95	3.59
186933	G2RL-14-E-CF DC24	24	1440	12A	8	4.35	3.95	3.59
186968	G2RL-24-CF DC12	12	360	8A	8	4.29	3.85	3.49
186976	G2RL-24-CF DC24	24	1440	8A	8	4.29	3.85	3.49
186941	G2RL-24 DC12	12	360	8A	8	4.09	3.69	3.29
186950	G2RL-24 DC24	24	1440	8A	8	4.09	3.69	3.29

Solid State Relays



G3NA Series



Pins: 4Type: DC/ACCompact dimensions to provide uniform mounting pitch

Built-in MOV effectively absorbs external surges

Operation indicator (red LED) enables monitoring operation

Protective cover for greater safety
 UL/CSA approved
 G3NA Series:
 Dimensions: 2.28"L x 1.69"W x 1.06"H

Part	Product	Control	Contact	Contact		Pricing	
Number	Number	Volt (VDC)	Volt (VAC)	Cur (max)	1	25	50
	(3NA Soli	d State R	elays			
186984	G3NA-205B-DC5-24	5-24	240	5A	\$16.95	\$15.25	\$13.75
186992	G3NA-210B-DC5-24	5-24	240	10A	16.95	15.25	13.75
187004	G3NA-220B-DC5-24	5-24	240	20A	19.95	17.95	15.95
187012	G3NA-225B-DC5-24	5-24	240	25A	22.95	20.95	18.95
187021	G3NA-240B-DC5-24	5-24	240	40A	36.95	33.49	29.95
187039	G3NA-425B-DC5-24	5-24	480	25A	49.95	44.95	40.49
	(3NE Soli	d State R	elays			
187047	G3NE-205T-USDC12	12	100/240	5A	\$12.95	\$11.49	\$10.49
187055	G3NE-205T-USDC24	24	100/240	5A	12.95	11.49	10.49
187063	G3NE-205T-USDC5	5	100/240	5A	12.95	11.49	10.49
187071	G3NE-210T-USDC12	12	100/240	10A	13.49	11.95	10.95
187080	G3NE-210T-USDC24	24	100/240	10A	15.95	14.35	12.95
187098	G3NE-210T-USDC5	5	100/240	10A	15.95	14.35	12.95
187101	G3NE-220T-USDC12	12	100/240	20A	18.95	16.95	15.35
187119	G3NE-220T-USDC24	24	100/240	20A	18.95	16.95	15.35
187127	G3NE-220T-USDC5	5	100/240	20A	18.95	16.95	15.35

187469

G5V Low Signal Relays









187266

187389

- · High sensivity: 150 mW nominal power consumption with 96mW pickup power
- · Conforms to Fcc part 68 voltage surge Low signal
- · Fully sealed construction

G5V-1 series: Pins: 6 · Contact form: SPDT G5V-2 series: • Pins: 8 · Contact form: DPDT

- Contact voltage: 125VAC/24VDC • Dimensions: .49"L x .30"W x .39"H
- Contact voltage: 125VAC/30VDC • Dimensions: .81"L x .45"W x .40"H

Part	Product	Coil	Coil	Contact		Pricing					
Number	Number	Voltage	Res. Ω	Current	1	25	50				
	(65V-1 Lo	w Signa	Relays							
184461	G5V-1-DC12	12	960	.5A/1A	\$ 4.79	\$4.29	\$3.89				
187231	G5V-1-DC24	24	3840	.5A/1A	2.35	2.10	1.89				
187240	G5V-1-DC5	5	166.7	.5A/1A	2.35	2.10	1.89				
	G5V-2 Low Signal Relays										
187258	G5V-2-DC12	12	288	.5A/2A	\$2.89	\$2.59	\$2.35				
184452	G5V-2-DC24	24	1152	.5A/2A	2.95	2.65	2.39				

G6 Low Signal Relays

G6A series:

- · High sensitivity can be driven by digital circuits
- · Low profile design allows use in 12.70mm PC board rack
- · Surge withstand voltage meets FCC Part 68 regulation
- · Can be mounted side by side due to low magnetic leakage
- Pins: 8
- Contact voltage: 125VAC/30VDC

· Contact form: DPDT

• Dimensions: .80"Lx .40"W x .33"H

G6E series:

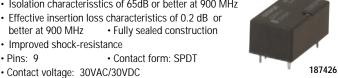
- · High sensitivity with pick-up coil power of 98mW
- · Bifurcated crossbar contact assures high reliability
- · Minimal loss of latching capability due to highly effcient magnetic circuit
- Pins: 5
- Contact voltage: 125/VAC/30VDC
- · Contact form: SPDT • Dimensions: 0.63"L x 0.39"W x 0.31"H

Part	Product	Coil	Coil	Contact		Pricing						
Number	Number	Volt	Res. Ω	Current	1	25	50					
	G6A Low Signal Relays											
187266	G6A-234PSTUSDC12	12	720	3A	\$4.69	\$4.19	\$3.75					
187282	G6A-234PSTUSDC5	5	125	3A	4.69	4.19	3.75					
187274	G6A-234PSTUSDC24	24	2880	3A	4.69	4.19	3.75					
	G	66E Lov	v Signal I	Relays								
187418	G6E134PSTUSDC5	5	125	3A	\$4.25	\$3.79	\$3.45					
187389	G6E134PSTUSDC12	12	720	3A	4.25	3.79	3.45					
187397	G6E134PSTUSDC24	24	2880	3A	4.25	3.79	3.45					
187400	G6E134PSTUSDC248	48	5760	3A	5.95	5.35	4.79					

G6 High-Frequency Relays

Design Based on Micro Strip Line Technology

- · Isolation characterisstics of 65dB or better at 900 MHz
- better at 900 MHz · Fully sealed construction
- · Improved shock-resistance
- Pins: 9
- · Contact voltage: 30VAC/30VDC
- Dimensions: .81"L x .46"W x .36"H



Part	Product	Coil	Coil	Contact		Pricing	J	
Number	Number	Voltage	Res. Ω	Current	1	25	50	
187434	G6Y-1DC4.5	4.5	-	-	\$4.75	\$4.25	\$3.85	
187442	G6Y-1DC5	5	125	.01A	4.29	3.85	3.49	
187426	G6Y-1DC12	12	720	.01A	4.29	3.85	3.49	

G7L General Purpose Relays

- · High capacity, high withstand voltage relay compatible with momentary voltage drops
- No contact chattering for momentary voltage drops up to 50% of rated voltage
- · UL class B construction standard
- · Wide range AC activated coil that handles 100 to 120 VAC at either 50 or 60Hz
- Miniature hinge for maximum switching capacity, particularly for inductive loads
- Conforming to IC 950

187485 G7L2ATUBJCB

- Coil voltage: 100/120
- · Contact voltage: 220VAC
- Coil resistance: 5260Ω
- Dimensions: (187469/187185) 2.75"L x 1.30"W x 2.40"H; (187451/187477) 2.70"L x 1.40"W x 2.40"H

Part	Product		Contact	Contact	Pricing		
Number	Number	Pins	Form	Current	1	25	50
187451	G7L1ABUBJCB	4	SPST(NO)	30A	\$16.49	\$14.79	\$13.39
187469	G7L1ATUBJCB	4	SPST(NO)	30A	11.95	10.75	9.69
187477	G7L 2ABUB ICB	6	DPST(NO)	25A	16 95	15 25	13.69

DPST(NO)

25A

LY General Purpose Relays

- Pins: 8 Arc barrier equipped
- · Contact voltage: 110VAC/24VDC
- · High dielectric strength (2,000 VAC)
- Long dependable service life assured by
- AgdO contacts · UL and CSA approved
- Dimensions: 1.10"L x 0.85"W x 1.4"H

187493/187506: Contact form: SPDT



187549

12.49



187514

10.15

11.25

187493

187514/187522: Contact form: DPDT

Part Product Contact Pricing Coil Number Number 50 Voltage Res. Ω Current 10 187493 LY1AC110/120 110/120 3750 15A \$6.69 \$5.95 \$5.39 187506 LY1AC24 24 180 15A 6.69 5.95 5.39 187514 LY2AC110/120 110/120 3750 10A 7.59 6.79 5.95 5.95 187522 LY2AC24 180 15A 7.59 6.79 24

MK2 General Purpose Relays

- · Contact voltage: 250VAC/28VDC
- · Contact form: DPDT • Pins: 8
- · Long life (minimum 100,000 electrical operations) assured by silver contacts
- · Built-in operation indicator (mechanical LED), diode surge suppression and varistor surge suppression
- · Contact operation can be easily checked by mechanical indicator and/or push-to-test button options
- Conforms to CENELEC standards
 Dimensions: 1.36"L x 1.36"W x 2.07"H

Part	Product	Coil	Coil	Contact							
Number	Number	Voltage	Res. Ω	Current	1	10	50				
187531	MK2PNSAC120	120	1578	10A	\$12.95	\$12.19	\$11.49				
187549	MK2PNSAC24	24	68	10A	11.95	11.25	10.49				

MY General Purpose Relays

For Sequence Control and Power Switching Applications

- · Increased reliability through automated production
- · Max. switching current: two-pole/10A, four-pole/5A
- · Environment-friendly cadmium-free contacts

187557/187565: • Contact form: DPDT • Pins 8

• Dimensions: 1.0"L x 0.93"W x 1.40"H

187573: • Contact form: 4PST

• Pins: 14

187557



•	Dimensions:	1.1	0"L >	(0.85	"W :	x 1	.40"H
---	-------------	-----	-------	-------	------	-----	-------

Part	Product	Coil	Coil	Contact	Pricing		
Number	Number	Voltage	Res. Ω	Current	1	10	50
187557	MY2AC110/120	110/120	4430	5A	\$5.59	\$4.95	\$4.45
187565	MY2AC24	24	180	5A	5.39	4.79	4.29
187573	MY4AC110/120	110/120	4430	3A	6.59	5.95	5.29



New Products 4

OMRON Basic Switches

· Common terminal position: bottom type

Part No. Product No.

187776

187784

187792

187805

187813

187821

187830

187848

187856

187864

187872

187881

187899

187901

187910

187928

187936

187944

· Contact form: SPDT Dimensions: 1.49"L x 0.41"W x 0.63"H

V-10G: • Rated voltage: 10A @ 250VAC

Service life: 50 million cycles mechanical; 300,000 cycles electrical

Actuator

Pin plunger

Pin plunger

Hinge lever

Long hinge

Pin plunger

Pin plunger

Hinge lever

Long hinge

Long hinge

Long hinge

Pin plunger

Hinge roller

Formed hinae

Short hinge roller

Formed hinged

Short hinge roller

Short hinge roller

Short hinge lever

V-15G: • Rated voltage: 15A @ 250VAC Service life: 50 million cycles mechanical; 100,000 cycles electrical

V-10G-1C24-K

V-10G-1C25-K

V-10G2-1C24-K

V-10G3-1C24-K

V-10G4-1C25-K

V-10G5-1C24-K

V-10G5-1C25-K

V-15G-1A5-K

V-15G-1C25-K

V-15G-1C26-K

V-15G2-1C25-K

V-15G2-1C26-K

V-15G3-1C25-K

V-15G3-1C26-K

V-15G4-1C25-K

V-15G5-1C25-K

V-15G5-1C26-K

V-15G6-1C25-K

Dimensions: 0.78"L x 0.25"W x 0.40"H



187776

\$1.95

2.59

2.59

2.75

2.79

2.95

2.49

2.49

1.95

1.95

2.69

2.59

2.89

2.25

2.25

3.19

2.49

3.19

187821

\$1.75

2.35

2.35

2.49

2.49

2.65

2.25

2.25

1.75

1.75

2.39

2.35

2.65

2.05

2.05

2.89

2.25

2.89

\$1.55

2.19

2.19

2.29

2.25

2.39

1.95

1.95

1.55

1.55

2.19

2.19

2.39

1.79

1.79

2.65 1.95 188787



Miniature, low profile and easy mounting. Ideal for applications such as audio, office and communications equipment, measuring instruments, TVs, VCRs, etc..



· Flux-tight base structure allow automatic soldering of the keyswitches onto a PC board





.25

188808

.21

162886 188787

162886/188779: Dimensions (height x pitch): 4.3 x 6.5mm

188787 : Dimensions (height x pitch): 7.3 x 6.5mm							
Part No.	Туре	Operating Force 1	25	50	100		
162886	B3F-1000	General purpose 100g\$.25	\$.23	\$.21	\$.19		
188779	B3F-1002	General purpose 150g29	.27	.25	.21		

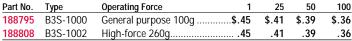
OMRON B3S Series Key Switches

Surface mount mechanical keyswitch for

high-density packaging.

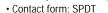
B3F-1050

- · Sealed construction allows immersion cleaning
- · Ground terminal available to protect against static electricity
- Dimensions: 0.26"L x 0.24"W x 0.17"





- Economical, subminiature basic switch offers long service life (30 million operations min.)
- Free from overtravel restrictions, permit easy setting











Datad		Dricing
187696	187717	187733
		1 1 1

 Dimens 	ions: 0.78"L x (J.25"W x 0.40"H		187661	187696	187717	18	7733
Part	Product		Contact	Common	Rated		Pricing	
Number	Number	Actuator	0F	Terminal Position	Voltage	1	10	50
187645	SS-10D	Pin plunger	150g	Straight vertical	10.1A @ 250VAC	\$2.69	\$2.45	\$2.35
187653	SS-10GL	Hinge lever	50g	Solder terminal	10.1A @ 250VAC	2.25	1.95	1.75
187661	SS-5	Pin plunger	150g	Solder terminal	3A @ 250VAC	1.49	1.35	1.19
187670	SS5-D	Pin plunger	150g	Straight vertical	3A @ 250VAC	1.49	1.25	1.19
187688	SS-5-F	Pin plunger	50g	Solder terminal	3A @ 250VAC	1.69	1.49	1.35
187696	SS-5-FT	Pin plunger	150g	Tab #110 terminal	3A @ 250VAC	1.49	1.35	1.19
187709	SS-5GL	Hinge lever	50g	Solder terminal	3A @ 250VAC	1.59	1.45	1.29
187717	SS-5GL13	Simulated power hinge	50g	Solder terminal	3A @ 250VAC	1.69	1.49	1.35
187725	SS-5GL13T	Simulated power hinge	50g	Tab #110 terminal	3A @ 250VAC	1.49	1.35	1.19
187733	SS-5GL2	Hinged roller	50g	Solder terminal	3A @ 250VAC	1.75	1.59	1.39
187741	SS-5GL2T	Hinged roller	50g	Tab #110 terminal	3A @ 250VAC	2.45	2.19	1.95
187750	SS-5GLT	Hinge lever	50g	Tab #110 terminal	3A @ 250VAC	1.49	1.35	1.19
187768	SS-5T	Pin plunger	150g	Tab #110 terminal	3A @ 250VAC	1.49	1.35	1.09

JAMECO Internal Computer Cables



· Weight: 0.3 lbs.

185068: Socket ribbon cable

· Length: 9"

 34 conductors 185076: Socket ribbon cable

Length: 14" • 40 conductors **185084:** Floppy disk drive cable for 3.5" and 5.25" drives

 Length: 25" For 34-pin header

185092: Floppy disk drive cable for 3.5" and 5.25" drives

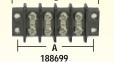
Length: 48" · For 34-pin header 185050: XT cable set • Length: 16.7"

· 20 and 34 conductors

Part No.	Description 1	10	100	
185068	9" socket cable\$1.95	\$1.79	\$1.49	
185076	14" socket cable1.95	1.79	1.49	
185084	25" floppy drive cable3.95	2.95	2.49	
185092	48" floppy drive cable4.95	4.49	3.95	
185050	16.7" XT cable set3.95	3.49	2.95	

KULKA® 601 GP Series Double Row Terminal Blocks

- · Base: general purpose phenolic; 150°C
- · Screws: #6-32, binder head, phil-slot
- Terminals: brass plated 7/16" centers
- 1100Vrms; 20A ratings; for 14-16 AWG wires
- Open black design UL/CSA/CE approved



6.00



Size (in.) Pricing 10 50 \$1.29 2.50 \$1.69 \$1.49 2.19 2.39 1.95 3.06 3.38 2.19 3.94 3.19 2.95 2.69 4.25 4.81 5.13 3.49 3.29 2.95

MILLENIUM Rechargeable NiMH Batteries and Battery Charger

of Poles

4

6

8

10

12

- Replaces thousands of throwaway alkaline batteries
- Twice the power of NiCad batteries

Charges of 1,000 times

Prod. No.

601GP4

601GP6

601GP8

188701 | 601GP12

601GP10

Part No.

188699

188681

188672

188664

185092

185050



5.69







3.95

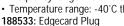
		185252				
Part No.	Description	185252	1	10	25	100
185279	700mAH AAA (2 pack)		\$7.49	\$7.19	\$6.49	\$5.95
185252	1600mAH AA (2 pack)		7.49	7.19	6.49	5.95
185261	1600mAH AA (4 pack)		12.95	11.95	10.95	9.95
185295	Universal 5 hour charger		21.95	19.95	17.95	15.95

188461

188437

MicroMate™ (MMCX) Edgecard

- Impedance: 50Ω
- · Frequency range: DC thru 6GHz
- Temperature range: -40°C thru 90°C





· Construction notes: machined

188541: Edgecard Jack

· Contact: BeCu

188541 · Construction: machined Part No. Product No. 10

908-21100**\$6.95** \$5.59 \$6.39 188541 908-22100**7.69** 6.59 5.75

MicroMate™ (MMCX) PCB Mount

- Impedance: 50Ω
- · Frequency range: DC thru 6GHz
- Temperature range: -40°C thru 90°C 188550: Right angle jack, PCB
- · Contact: BeCu
- · Construction: 1 piece contact 188568: Straight PCB Plug
- · Contact: brass
- · Construction: machined Part No. Product No. 10 908-24100\$9.79 \$8.29 188550 188568

908-21103**7.29**

MicroMate (MMCX) **Cable Connectors**

- Impedance: 50Ω
- Frequency range: DC thru 6GHz
- Temperature range: -40°C thru 90°C
- · Outer cable attachment: crimp
- · Inner cable attachment: solder
- · Construction: captivated contact 188576: Straight plug for RG-174/U,

RG-188/U and RG-316/U cable 188584: Right angle plug for RG-178/U

and RG-196/U cable Part No. Product No. 188576 908-41300\$6.95 \$5.95 \$5.25

908-432008.69

MCX 50Ω Crimp Attachments for Flexible Cable

- For RG-174/U, RG-188/U and RG-316/U cable
- Impedance: 50Ω

188584

- · Frequency range: 0-6GHz
- Mating: 50Ω snap-on coupling
- Temperature range: -65°C to +165°C
- · Outer cable attachment: crimp · Inner cable attachment: solder
- · Construction: gold plated
- 188592: MCX crimp plug, crimp 188605: MCX crimp jack, crimp

188613: MCX angle plug, crimp

Part No. Product No. \$3.95 188592 919-101P-51SX**\$5.29** \$4.49 919-107J-51SX......**4.75** 4.19 3.59 188613 919-104P-51AX**5.75** 4.95 4.29

MCX 50Ω PCB Receptacle

- Impedance: 50Ω
- · Frequency range: 0-6GHz
- Mating: 50Ω snap-on coupling
- Temperature range: -65°C to +165°C
- · Terminal type: blunt post, four legs
- Panel jack for RG-174/U, RG-188/U and RG-316/U cable
- .155" legs · Construction: stand off pads Product No. 919-109J-51PX......**\$3.95** \$3.39 \$2.49

SMA Brass Plug

- Impedance: 50Ω
- Frequency range: 0-18GHz
- · Outer cable attachment: crimp
- · Inner cable attachment: solder
- 188533 · Type: crimp plug
 - For RG-174/U, RG-188/U and RG-316/U cables
 - · Construction: captive contact

Part No.	Product No.	1	10	50
188488	901-9877-RFX\$3	.19	\$2.59	\$1.95

SMA Brass PCB Receptacles

188509

188525

188349

Jacks

188550

188576

188592

188605

188613

- Impedance: 50Ω
- · Frequency range: 0-18GHz
- · Terminal type: blunt post

 Gold plated body
 Four legs 188509: PCB Receptacle (J)

188525: PCB Angle Receptacle (J)

	J 1	` '	-	
Part No.	Product No.	1	10	50
188509	901-144-8RFX	\$3.69	\$2.95	\$2.25
188525	901-143-6RFX	5.95	4.95	3.79

BNC 50Ω 3-Piece Cable Crimp Plugs

- Outer cable attachment: crimp
- Impedance: 50Ω · Silver plated
- Frequency range: 0-4GHz w/ low reflection

188306: For RG-58/U and RG-184/U cables

- · Inner cable attachment: crimp 188314: For RG-59/U cable
- · Inner cable attachment: crimp
- **188322**: For RG-142/U, RG-400/U, Plenum 59 and 62 cables
- Inner cable attachment: solder 188381: For RG-174/U, RG-179/U, RG-187/U,
- RG-188/U and RG-316/U cables · Inner cable attachment: press fit
- Features preinstalled center contact
- 188349: For RG-174/U, RG-188/U and RG-316/U cables
- Inner cable attachment: crimp 188357: For RG-179/U and RG-187/U cables
- · Inner cable attachment: crimp
- 188331: For Plenum 58 cable

· Inner cable attachment: press fit

Part No.	Product No.		10	50
188306	31-320-RFX	\$1.69	\$1.59	\$.95
188314	31-321-RFX	1.69	1.59	.95
188322	68175-11RFX	1.69	1.59	.95
188381	31-5560-RFX	1.49	1.39	1.19
188349	31-315-RFX	2.19	1.95	1.09
188357	31-242-RFX	2.19	1.95	1.25
188331	36650-3RFX	1.59	1.49	1.29

BNC 50 Ω Bulkhead Jack

- · For RG-59/U cable
- Impedance: 50Ω
- · Silver plated
- · Frequency range: 0-4GHz w/ low reflection
- Outer/inner cable attachments: Suretwist®

Part No.	Product No.	1	10	50
188365	31-5136-RFX	\$2.29	\$1.95	\$1.19

BNC 50 Ω Adapters

- Straight · Jack-jack
- Impedance: 50Ω Silver plated

Part No. Product No. 188411 31-219-RFX.....\$2.59

BNC 50 Ω T-Adapter

- · Jack-plug-jack
- Impedance: 50Ω
- · Silver plated
- Frequency range: 0-4GHz w/ low reflection

Part No.	Product No.	1	10	50
188429	31-208-RFX	\$4.69	\$3.59	\$2.39

BNC 50 Ω Bulkhead Adapter

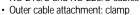
- Gasketed
- · Jack to jack
- Impedance: 50Ω
- Silver plated
- · Frequency range: 0-4GHz w/ low reflection

Part No.	Product No.	1	10	50
188402	31-220G-RFX	.\$4.08	\$3.29	\$2.09

Type N Cable Plugs

- Impedance: 50Ω
- · Silver plated
- 188461: For RG-8/U, RG-9/U, RG-144, RG-165/U, RG-213/U, RG-214/U,

RG-216/U and RG-225/U cables



 Inner cable attachment: solder 188445: For RG-58/U and

- RG-141/U cables · Outer cable attachment: crimp
- · Inner cable attachment: crimp 188453: For RG-58/U, RG-141/U, RG-142A/U, and RG-400/U cables
- Outer cable attachment: clamp
- · Inner cable attachment: solder

188437: Ethernet cables

- · Outer cable attachment: crimp
- · Inner cable attachment: crimp

Part No.	Product No.	1	10	50
188461	82-202-RFX	\$6.09	\$4.95	\$2.89
188445	82-5375-RFX	4.59	3.29	2.35
188453	34025-RFX	5.69	4.95	2.95
188437	82-4426-11RFX	4.95	3.95	2.49

Type N Adapter

- Impedance: 50Ω
- · Silver plated
- · Jack to jack
- Straight

Part No.	Product No.	1	10	50
188470	82-101-RFX	\$4.69	\$3.49	\$2.45

CTL Series Crimp Tools

188630: For RG-55, 58, 59, 62, 140, 141, 142, 210, 223, 303, 400, Plenum 59, 62, Belden 9258, 9259, 9907, and 89907 cables

For BNC and TNC

3-piece crimp connectors **188648:** For RG-6, 174, 179, 187, 188, 316, Plenum 58, and Belden 8281 cables

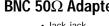
 For BNC and TNC 3-piece crimp connectors 188656: For RG-8, 11, 55, 58, 141, 142, 149, 213,

For type N 3-piece connectors

Part No.	Product No.	1	5
188630	CTL-1	\$51.35	\$47.75
188648	CTL-2	47.75	45.75
188656	CTL-3	47.75	45.75

214, 223, 225, 303, 393, 400 and Ethernet cables

For additional Amphenol® Products see page 67 and Back Cover



· Frequency range: 0-4GHz w/ low reflection

Order Toll-Free

Systron® Switching Power Supplies

The switching power supplies systron® PS offer many advantages over conventional power supplies.

- · Overcurrent switch with automatic resart, over temperature switch off, reset with disconnection of input voltage min. 30 sec.
- Operating temp.: 0°C to 55°C
- DIN rail mount compact modules
- Wide range of supply voltages · Constant output voltage with good regulation
- Short circuit and overload proof
- Fused input Low weight
- High efficiency
 Low heating
- CSA/UL listed, EN50178 • VDE 0160
- 186343:
- Output voltage: 24VDC/0.5A
- Input voltage: 90-260VAC/ 105-260VDC @ 47-440Hz
- Typical input current at nominal load: 0.46A (115V)/0.27A (230V)
- Size: 0.9"W x 3.1"H x 4.7"D
- · Weight: 0.5 lbs.

186351:

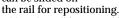
- · Output voltage: 24VDC/1A
- Input voltage: 90-260VAC/105-260VDC @ 47-440Hz Typical input current at nominal load: 0.46A
- (115V)/0.27A (230V)
- Size: 1.8"W x 3.1"H x 3.9"D · Weight: 0.5 lbs. 186360:
- · Output voltage: 24VDC/2A
- Input voltage: 90-140VAC, 140-260VAC/160-260VDC @ 47-440Hz (min. 10ms at 10% load)
- Typical input current at nominal load: 1A (90V)/0.45A (230V)
- Size: 1.8"W x 3.1"H x 4.7"D · Weight: 0.7 lbs. 186378:
- · Output voltage: 24VDC/5A
- Input voltage: 90-260VAC/127-260VDC @ 47-63Hz
- Typical input current at nominal load: 1.3A (115V)/0.63A (230V)
- Size: 3.5"W x 3.1"H x 4.7"D · Weight: 1.3 lbs.

Part No.	Manufacturer No.	1	10	100
186343	242341400	\$79.95	\$71.95	\$63.95
186351	242341800	99.95	89.95	79.95
186360	242341700	129.95	116.95	104.95
186378	242341600	249.95	224.95	199.95

DIN Mounting RAIL

PR30

The terminal blocks of this range, are snapped onto the rails below, they 🦏 can be slided on



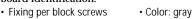
- · Mounting rail for termnal blocks and fuse holder terminal blocks Prepunched
- · Material: zinc bichromate plate steel

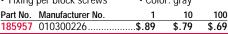
Part No.	Manufacturer N	o. 1	10	100
185965	017322005	\$5.95	\$5.35	\$4.79

End Stop

BAM

The end stops are mounted at the extremity of the terminal board assembly, giving additional support to the terminal blocks as well as a means of terminal board identification.





Fuse-Holder Terminal Blocks





185981 Shown w/ fuse not included

M 4/8SF

186343

186351

186378

185973/185981/185990: Fuse holder terminal blocks

- For use with 5 x 20 fuses (below)
- · Blocks with led indicators are labeled "+" on the outside of the lever · 8mm block
- Compression clamp
- · Color: gray
- 185973: Standard block 185981: Equipped block
- With fusion indicator 185990: Equipped block · With fusion indicator
- · Equipped with (2) test sockets

186001: End section for M 4/8SF terminal blocks

- · Color: gray Type: FEM8S

terminal blocks			18	36001
Part No.	Manufacturer No.	1	10	10
185973	011565725	\$5.69	\$5.15	\$4.5
185981	011566121	9.95	8.95	7.9

Part NO.	Manufacturer No.		10	100
185973	011565725	\$5.69	\$5.15	\$4.59
185981	011566121	9.95	8.95	7.95
185990	011566323	8.49	7.59	6.89
186001	011695115	49	.45	.39
		_		

Standard Fuses

- For fuse holder M 4/8 (above)
- Type: FU520
- Size: 5 x 20 mm
- 250V
- .5A 5A

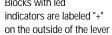
Part No.	Mfg. No.	Amps	1 10	100
186175	000828815	0.5 \$1.0 9	\$.99	\$.89
186191	000829013	1 1.0 9	.99	.89
186204	000829100	2 1.0 9	.99	.89
186183	000828916	3.15 1.0 9	.99	.89
186212	000829201	5 1.0 9	.99	.89

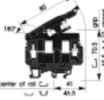
Fuse-Holder Terminal Blocks

MI 10/13SF

186010:

- Standard block
- For use with .25" x 1" and .25" x 1.25" fuses
- Blocks with led indicators are labeled "+'





186010

 Black body 13mm block

186010: End section for ML 10/13SF terminal blocks

- · Color: black
- Type: FEM13U
- · Compatible with above terminal blocks



Part No.	Manufacturer No.	1	10	100
186010	019909513	\$7.29	\$6.59	\$5.89
186511	019963524	69	.62	.55

Standard Fuses

Quick-blow fuse cartridge

- · For fuse holder ML 10/13 (above)
- Type: FU633
- · Size: .25" x 1.25"
 - .25A 16A

Part No.	Mfg. No.	Amps	1	10	100
186221	016855403	.25\$	1.49	\$1.35	\$1.19
186239	016855504	.63	.1.49	1.35	1.19
186247	016855605	1	.1.49	1.35	1.19
186255	016855706	1.6	.1.49	1.35	1.19
186263	016855817	2.5	.1.49	1.35	1.19
186271	016855910	4	.1.49	1.35	1.19

186280 016856015 1.19 6.3 **1.49** 1.35 **186298** 016856102 10.....**1.49** 1.35 1.19 **186301** 016856203 16.....**1.49** 1.35 1.19

Log on today!

ameco.com

Assembled Jumper Bars

- · Pre-assembled jumper bar
- · IP 20 without protection
- Fractionable jumper for standard block
- Screw is captive



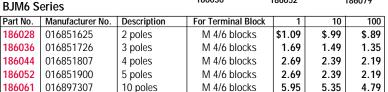


186052





186087





BJM8 Series

Part No.	Manufacturer No.	Description	For Terminal Block	1	10	100
186079	016852005	2 poles	M 6/8 blocks	\$1.59	\$1.45	\$1.29
186087	016852122	3 poles	M 6/8 blocks	2.19	1.95	1.75
186095	016852223	4 poles	M 6/8 blocks	2.79	2.49	2.25
186108	016852324	5 poles	M 6/8 blocks	3.89	3.49	3.15
186116	016897400	10 poles	M 6/8 blocks	6.29	5.59	4.95



Part No.	Manufacturer No.	Description	For Terminal Block	1	10	100
186124	017361121	2 poles	M 10/10 blocks	\$1.59	\$1.45	\$1.29
186132	017361222	3 poles	M 10/10 blocks	2.49	2.25	1.95
186141	017361323	4 poles	M 10/10 blocks	3.39	3.09	2.75
186159	017361424	5 poles	M 10/10 blocks	4.39	3.95	3.49
186167	017361525	10 poles	M 10/10 blocks	7.59	6.79	5.95





186167



186554

186571

186466

186482

1.19

1.35

186415

Standard DIN Rail-Mounted **Terminal Blocks**

Universal mounting foot snaps onto standard DIN and DIN 2 rail profiles. Terminals are positively retained on rails, but can be removed without disturbing adjacent units.



Material: molded thermoplastic

185914: M 4/6

- Standard 6mm (0.238")
- 22-12 AWG wire
- Compression clamp
- · Color: gray

185922: M 6/8

- Standard 8mm (0.315")
- 22-8 AWG wire
- Compression clamp
- · Color: gray

185931: M 10/10

- Standard 10mm (0.394")
- · 20-6 AWG wire
- Compression clamp
- · Color: gray

185949: End section for DIN Rail-mounted terminal blocks

- · Color: gray
- Type: FEM6
- · Compatible with above terminal blocks



185922

185949

186319

186327

186335

Part No.	Manufacturer No.	1	10	100
185914	011511607	\$1.09	\$.99	\$.89
185922	011511811	1.49	1.35	1.19
185931	011512017	1.79	1.59	1.45
185949	011836816	\$.49	\$.45	\$.39

Standard Marker Cards

- · Each card contains 10 strips of 10 markers (100 markers per card)
- Marker cards are white polyamide with black lettering

186319: RC610 Blank

 Marker for blocks from the 6mm spacing (L=5mm)

186327: RC610 Increasing order 1-100

 Marker for blocks from the 6mm spacing (L=5mm)

186335: RC810 Blank

 Marker for blocks from the 8mm

Spacin	g (L=Tomini)			
Part No.	Manufacturer No.	1	10	100
186319	023300001	\$3.79	\$3.39	\$2.95
186327	023303026	4.29	3.85	3.49
186335	023400002	5.95	5.35	4.79

Sticker Marker Card

RB5A

- Card of 240 markers
- · Each strip is pre-cut to make tearing-off easy
- Material: polyester
- Blank
- · Dimensions: 5mm

Birriorisions, orinin								
Part No.	Manufacturer No.	1	10	100				
186407	017862302	\$8.95	\$7.95	\$6.95				

PCB Terminal Blocks

Spacing: .200"

- 1 pin per pole
- Screw clamp connection
- Single deck block 1
- Vertical mounting
- · Spacing: .200"
- Pin: .039" x .039" x .165"
- · Thickness PCB .126"
- · Terminal blocks for connection parallel to PCB
- · Color: gray

186386: PM 2,5/2-V • 2 pole 186394: PM 2.5/3-V • 3 pole

100374.	1 W 2,3/3-V 3 poic			
Part No.	Manufacturer No.	1	10	100
186386	L70520201000	\$.39	\$.35	\$.31
186394	L70520301000	55	.49	.45

PCB Terminal Blocks

- Type: L 189 200

- Pin: .031" x .035" x .197"

- clamp connection perpendicular to PCB

- 186597: 3 pole

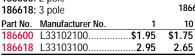
Pa	rt No.	Manufacturer No.	1	10	100
18	6589	L18920201000	\$1.19	\$1.09	\$.99
18	6597	L18920301000	1.79	1.59	1.45

Spacing: .400"

- 600V, 30A
- 1 pin per pole
- Screw clamp connection
- Spacing: .400"
- Pin: .031" x .055" x .142"
- Terminal blocks for screw clamp connection perpendicular to PCB





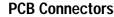


PCB Terminal Blocks

- Type: L 33 200 D

- Screw clamp connection
- Pin: .047" x .079" x .142"
- connection perpendicular to PCB
- 186634: 3 pole
- 186651: 5 pole

Part No.	Manufacturer No.	1	10	100
186626	L33202001	\$3.59	\$3.25	\$2.89
186634	L33203001	5.39	4.85	4.3
186642	L33204001	7.19	6.49	5.79
186651	L33205001	8.95	7.95	6.9



186546

186562

Spacing: .200"

- Vertical open sockets
- · Plug shape: tile
- Spacing: .200"
- Pin: .039" x .039" x .138"



• 2 pole

186386

186394

186597

· Color: gray

186554: CPET/3V

3 pole

186562: CPET/4V 4 pole 186571: CPET/8V · 8 pole

Part No.	Manufacturer No.	1	10	10
186546	009410211	\$.39	\$.35	\$.3
186554	009410312	59	.53	.4
186562	009410413	75	.69	.59
186571	009410827	1.49	1.35	1.19

PCB Connectors

- Horizontal open sockets
- · Plug shape: tile
- Spacing: .200"
- · Color: black
- 2 pole
- 186474: CPET/4H
- 186482: CPET/8H 8 pole

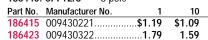
Part No.	Manufacturer No.	1	10	10
186458	009420225	\$.39	\$.35	\$.3
186466	009420326	59	.45	.3
196/7/	000420427	75	60	5

PCB Connectors

Spacing: .200"

- · Plugs, wires to parallel connection

- 186423: CPFT2/3 • 3 pole

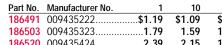


\$.95 1.45 **186431** 009430423......**2.39** 1.95 2.15 **186440** 009430807......**4.79** 3.89 4.29

PCB Connectors

Spacing: .200"

- · Plugs, wires to perpendicular connection
- · Plug shape: tile
- Color: black 186491: CPFT2/R-2 • 2 pole
- 186520: CPFT2/R-4 4 pole 186538: CPFT2/R-8 • 8 pole





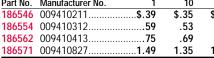


186491









Spacing: .375"

- 300V, 30A
- 1 pin per pole
- Spacing: .375"
- · Thickness PCB .094"
- · Terminal blocks for screw
- Screw clamp connection
- 186589: 2 pole

Part No.	Manufacturer No.	1	10	
186589	L18920201000	\$1.19	\$1.09	
104507	L 10020201000	1 70	1 50	

PCB Terminal Blocks

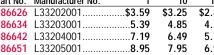
- Type: L 33 100

- · Thickness PCB .094"
- Color: gray
- 186600: 2 pole

2.65

Spacing: .500"

- 600V, 45A • 1 pin per pole
- Spacing: .500"
- · Thickness PCB .094" Terminal blocks for screw clamp
- · Color: gray 186626: 2 pole
- 186642: 4 pole





186600

186618

100

\$1.59

2.39

10

186626

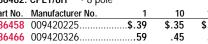


186634

186458

Spacing: .200"

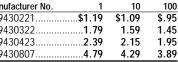
- Pin: .039" x .039" x .162"
- 186458: CPET/2H
- 186466: CPET/3H • 3 pole
- 4 pole

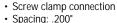


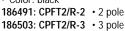
186482 009420803......**1.49**

- Plug shape: tile
- Screw clamp connection
- · Spacing: .200" Color: black
- 186415: CPFT2/2











1.45 **186520** 009435424......**2.39** 2.15 **186538** 009435800......**4.79**

740	0 Sorie		We carry major manufa	⊕	s – ca					Ņ-	
	0 Serie		Dual-In-Line Packa	90 111	11111				Continued) Dual-In-Line Packa	311	WW
	Product No.		Description 1	10	100	-	Product No.		Description 1	10	100
	7400 ★	14	Quad 2-input NAND gate	\$.49	\$.45		74132	14	Quad 2-input NAND Schmitt trigger\$.69	\$.59	\$.35
49007 49015	7401 7402★	14 14	Quad 2-input NAND gate (O.C.) .49 Quad 2-input NOR gate .59	.45 .49	.39	49496		16	8 to 3 line octal priority encoder	.79	.69
49015	7402 ×				.45	49509		24	16 to 1 line multiplexer	1.75	1.55
49040	7404 × 7405	14 14	Hex inverter (2392102)	.49 .25	.45 .22	49525		16	8-input multiplexer	.25	.15
49091	7405 7406★	14	Hex inverter buffer/driver (O.C.)45	.39	.35	49550	74153	16	Dual 4/1 data selector/multiplexer	.25	.15
49120	7407 ★	14	Hex buffer/driver (O.C.)	.79	.69	49568	74154 ★	24	4 to 16 line decoder/demultiplexer (9311) 2.25	1.95	1.75
49146	7408 ★	14	Quad 2-input AND gate	.49	.45	49605	74157	16	Quad 2/1 data selector (9322)	.29	.19
49189	7410 ★	14	Triple 3-input NAND gate25	.22	.15	49648	74160	16	Decade counter with asynch. clear25	.19	.12
49269	7411	14	Triple 3-input AND gate3.95	3.59	3.25	49664	74161	16	Synchronous 4-bit counter (9316)	.29	.19
49402	7413	14	Dual 4-input NAND gate Schmitt trigger25	.22	.19	49672	74163	16	Synchronous 4-bit counter	.35	.12
	7414 *	14	Hex inverter Schmitt trigger45	.39	.35	49681	74164	14	8-bit serial shift register35	.29	.25
49630	7416	14	Hex inverter buffer/driver (O.C.)	.25	.12	49699	74165	16	8-bit serial shift register, parallel load69	.59	.39
49728	7417	14	Hex buffer/driver (O.C. hi-voltage)79	.69	.59	49779	74174	16	Hex D-type flip-flop with clear	.25	.12
50008	7420	14	Dual 4-input NAND gate	.45	.39	49795	74175	16	Quad D-type flip-flop with clear29	.25	.12
50024	7421	14	Dual 4-input AND gate2.95	2.75	2.49	49824	74179	16	4-bit parallel-access shift register	.29	.10
50083	7425	14	Dual 4-input NOR gate with strobe 1.09	.99	.89	49832	74180	14	9-bit odd/even parity generator/checker79	.69	.35
50139	7427	14	Triple 3-input NOR gate	.35	.29	49841	74181	24	Arithmetic logic unit/function generator1.95	1.75	1.55
50198	7428	14	Quad 2-input NOR buffer	.49	.45	49883	74189	16	64-bit RAM tri-state (DM8599N)3.59	3.25	2.95
50227	7430	14	8-input NAND gate	.22	.12	49904	74191	16	Binary up/down counter	.89	.79
50235	7432 ★	14	Quad 2-input OR gate	.49	.45	49912	74192 *	16	Decade up/down counter with clear3.95	3.59	3.25
50315	7438	14	Quad 2-input NAND buffer (O.C.)	.29	.25	49939	74193 ★	16	Binary up/down counter with clear1.39	1.19	1.09
50358	7440	14	Dual 4-input NAND buffer	.22	.15	49955		16	4-bit bi-directional shift register1.39	1.19	1.09
50374	7442	16	BCD-to-decimal decoder	.79	.69	49963		16	4-bit parallel-access shift register29	.25	.15
50403	7445	16	BCD-to-decimal decoder/driver (30V)99	.89	.79	50041		16	Dual mono. multiv. Schmitt trigger35	.29	.15
50411	7446	16	BCD-to-7 segment decoder/driver (30V)1.49	1.39	1.29	50104		16	8-bit addressable latch (9334)	.29	.19
50420	7447 ★	16	BCD-to-7 segment decoder/driver (15V)1.09	.99	.89	50171		16	Quad set-reset latch	.25	.22
50518	7470	14	Edge-triggered JK flip-flop	.45	.35	50286		16	Hex buffer tri-state (DM8097N)	.15	.10
50526	7472	14	AND gated JK master/slave flip-flop99	.89	.59		SDLD001A		Texas Instruments TTL Data Book34.95		
50534	7473★	14	Dual JK flip-flop with clear	.89	.79				A Committee of the Comm	_	
50551	7474*	14	Dual D flip-flop45	.39	.29	Part No			\$100	1 61	10 16.95
50577	7475	16	4-bit bi-stable latch2.95	2.75	2.49	84953			series IC cabinet kit		
	7476 ★	16	Dual JK flip-flop with preset and clear1.19	1.09	.99	74 C	00 Ser	ies	Dual-In-Line Packag		11111
	7483 ★	16	4-bit binary full adder	.79	.69	Part No	Product No.	Pins	Description	1	10
50657	7485	16	4-bit magnitude comp	.39 .69	.29 .59	44222	74C00	14	Quad 2-input NAND gate	\$.89	\$.79
50665	7486 *	14	Quad EXCLUSIVE-OR gate .79 64-bit RAM P 50ns (3101) 2.95		2.49	63538	74C02	14	Quad 2-input NOR gate	39	.35
50681	7489 7490★	16 14	Decade counter	2.75 .79	.69		74C04	14	Hex inverter (CD4069)		.35
50737		14	Divide-by-12 counter	1.09	.89	44257		14	Hex inverter Schmitt trigger (CD40106)		.35
	7493 ★	14	4-bit binary counter	1.19	1.09		74C74	14	Dual D flip-flop		1.19
50770		14	4-bit parallel-access shift register (K155N) .69	.59	.39		74C174	16	Hex flip-flop (CD40174/MC14174BPC)		.29
50788	7496	16	5-bit parallel-in, parallel-out shift register59	.49	.39						
50796	7497	16	Synch. 6-bit binary rate multipliers1.39	1.29	1.19		74C193	16	Binary up/down counter w/ clear (40193)		1.29
49234	74107	14	Dual JK flip-flop with clear25	.19	.12		74C221	16	Dual monostable multivibrator		3.59
49251	74109	16	Dual positive edge triggered JK flip-flop89	.79	.49		74C367	16	Hex buffer tri-state (80C97/CD4503)		.45
49293		24	Dual 4-bit latches with clear (9308)89	.79	.69		74C373	20	Octal D-type flip-flop with clear tri-state	3.95	3.59
	74121 ★	14	Monostable multivibrator99	.89	.79	44409	74C374	20	Octal D flip-flop tri-state (INS82C06N)	.1.49	1.25
49349		14	Retriggerable mono. multivibrator with clear89	.79	.59	44564	74C922	18	16-key keyboard encoder (INS8245N)	.6.95	6.25
49357		16	Dual retriggerable mono. multivibrator99	.89	.79	44572	74C923	20	20-key keyboard encoder (INS8246N)	.6.95	6.25
49373		14	Quad bus buffer tri-state (DM8093N)99	.89	.79	44581	74C925	16	4-digit CTR with MUX D segment driver	.6.95	5.95
49381		14	Quad bus buffer tri-state (DM8094N)	.69		44599	74C926	18	4-digit CTR with MUX D segment driver	.6.95	5.95
			, ,						- v		



7.41	S00 Se	rias			1	- Cal	74LS00 Series (Continued) Dual-In-Line Package	
	. Product No.		Dual-In-Line F Description	аскад 1	e 10	100	Part No. Product No. Pins Description 1 10	100
	74LS00★	14	Quad 2-input NAND gate\$		\$.19	\$.15	46885 74LS166 16 8-bit shift register, parallel load	\$.25
	74LS00★	14	Quad 2-input NOR gate		.19	.17		.35
46308	74LS03	14	Quad 2-input NAND gate (O.C.)		.19	.17	46922 74LS173 16 4-bit D-type req. tri-state	.29
46316	74LS04★	14	Hex inverter	.25	.19	.17	46931 74LS174 16 Hex D flip-flop with clear	.22
46341	74LS05	14	Hex inverter (O.C.)	.25	.19	.17	46957 74LS175 16 Quad D flip-flop with clear	.22
46359	74LS06	14	Hex inverter buffer/driver (O.C.)		.45	.39	46973 74LS181 24 Arithmetic logic unit/function generator1.09 .99	.89
46367		14	Hex buffer/driver (O.C. hi-voltage)		.79	.69	47001 74LS191 16 Up/down binary counter	.29
	74LS08*	14	Quad 2-input AND gate		.19	.17	47010 74LS192★ 16 Decade up/down counter with clear 3.95 3.59	3.25
46404	74LS09 74LS10	14 14	Quad 2-input AND gate (O.C.)		.25 .19	.19 .17	47036 74LS193★ 16 Binary up/down counter with clear	.45
46439	74LS10	14	Triple 3-input NAND gate		.19	.17	47052 74LS194 16 4-bit bi-directional shift register	.45
46640	74LS14*	14	Hex inverter Schmitt trigger		.19	.17	47061 74LS195 16 4-bit parallel-access shift register	.25
	74LS20	14	Dual 4-input NAND gate		.19	.17	47124 74LS221 16 Dual mono. multivibrator Schmitt trigger39 .35	.29
47108	74LS21	14	Dual 4-input AND gate	.25	.19	.17	47141 74LS240★ 20 Octal invert. line driver tri-state	.19
47378	74LS27	14	Triple 3-input NOR gate	.25	.19	.17	47167 74LS241 20 Octal bus/line driver tri-state	.25
47458	74LS30	14	8-input NAND gate		.19	.17	47175 74LS243 14 Quad transceiver tri-state	.25
47466	74LS32★	14	Quad 2-input OR gate		.19	.17	47183 74LS244★ 20 Octal driver tri-state	.29
	74LS37	14	Quad 2-input NAND buffer		.19	.17	47212 74LS245★ 20 Octal bus transceiver tri-state	.29
	74LS38 74LS42	14 16	Quad 2-input NAND buffer (O.C.)		.25 .59	.15 .49	47247 74LS247 16 BCD to 7-segment decoder/driver (0.C.)	.59
477790	74LS42 74LS47★	16	BCD to 7-seq. decoder/driver (O.C.)		.79	.69	, ,	.15
47811		16	BCD to 7-seg. decoder/driver (0.0.)		4.49	3.95	·	
	74LS51	14	Dual 2-wide 2-input AND/OR inv. gate		.29	.25	i i	.22
47992	74LS73	14	Dual JK flip-flop with clear		.45	.39		
48004	74LS74★	14	Dual D flip-flop	.29	.25	.22	47360 74LS266 14 Quad EXCLUSIVE-NOR gate (0.C.)	.25
48021	74LS75	16	4-bit bi-stable latch	.55	.45	.39	47386 74LS273 20 Octal D-type flip-flop with clear	.29
48039	74LS76★	16	Dual JK flip-flop with preset and clear		.59	.49	47407 74LS279 16 Quad set-reset latches	.22
	74LS83	16	4-bit binary full adder		.39	.35	47415 74LS280 14 9-bit odd/even parity generator/checker	.12
	74LS85	16	4-bit magnitude comparator		.29	.25	47423 74LS283 16 4-bit binary full add with fast carry	.35
48098 48119	74LS86★ 74LS90★	14 14	Quad EXCLUSIVE-OR gate Decade counter		.25 .45	.22 .39		.89
	74LS92	14	Divide-by-12 counter		.39	.35	47562 74LS367 16 Hex buffer tri-state	.22
	74LS93*	14	4-bit binary counter		.59	.49	47600 74LS373★ 20 Octal D flip-flop tri-state	.29
48178	74LS95	14	4-bit parallel-access shift register		.79	.69	47634 74LS374★ 20 Octal D F/F edge-trig tri-state	.29
46412	74LS107	14	Dual JK flip-flop with clear	.25	.19	.17	47669 74LS377 20 Octal D register common enable	.29
46421	74LS109	16	Dual JK pos. edge-trig. flip-flop	.25	.19	.17	47722 74LS390 16 Dual 4-bit decade counter	.29
46447		16	Dual JK neg. edge-trig. flip-flop		.19	.17	47731 74LS393 14 Dual 4-bit binary counter	.35
	74LS122	14	Retrig. mono. multivibrator comm. CLK		.35	.29	171803 74LS491 24 10-bit up/down counter	
	74LS123★		Dual mono. multivibrator with clear		.29	.25	47861 74LS540 20 Octal invert. buffer/line driver tri-state	.39
46527	74LS125 74LS126	14 14	Quad bus buffer neg. enable tri-state Quad bus buffer tri-state		.29 .29	.22 .25		.49
	74LS120	14	Quad 2-input NAND Schmitt trigger		.29	.25	(1.09
	74LS136	14	Quad EXCLUSIVE-OR gate (O.C.)		.29	.15	3. 0	1.09
46607			3 to 8 decoder/demultiplexer		.25	.22	103974 74LS595 16 8-bit serial-to-parallel shift reg. tri-state3.95 3.59	2.95
46623	74LS139	16	2 to 4 decoder/demultiplexer	.29	.25	.22	47950 74LS645 20 Octal bus transceiver tri-state	.59
46666	74LS145	16	BCD-to-decimal decoder/driver	.45	.39	.35	47984 74LS688 20 8-bit magnitude comparator1.19 1.09	.99
	74LS147	16	10 to 4 priority encoder		.89	.79	Part No. Description See page 22 for details \$137 1	10
	74LS148	16	8 to 3 priority encoder		.79	.69		99.95
	74LS151	16	8-input multiplexer		.25	.22		85.95
46720		16	Dual 4 to 1 selector/multiplexer		.25	.22	Jameco IC Test Clip Series	
46738 46754	74LS154★ 74LS155	24 16	4 to 16 line decoder/demultiplexer		1.75 .19	1.55 .12	• For temporary connections to DIP package components	,
	74LS155	16	Dual 2/4 demultiplexer (O.C.)		.19	.12	Heavy-duty spring loaded hinge provides positive contact 20 AWG insulated gold contacts	2103
	74LS157	16	Quad 2/1 data selector		.25	.22	• 20 AWG insulated gold contacts • Color: white plastic Part No. Product No. Description 1 10	
46800		16	Decade counter with asynch. clear		.59	.49		25 3.95
46818	74LS161	16	Synch 4-bit counter (733W01729L1)		.25	.22		5.59
46842	74LS163	16	Fully synch. 4-bit counter		.25	.22	· · · · · · · · · · · · · · · · · · ·	5.25
	74LS164★	14	8-bit serial shift register		.25	.19	22162 JTC28 28-pin 8.95 7.95	6.49
46877	74LS165	16	8-bit serial shift register, parallel load	.49	.45	.39	22189 JTC40 40-pin	7.95
Order	Toll-Free							

Order Toll-Free 24-hours a day 7-days a week!

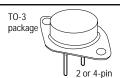


749	00 Ser	ies	we carry major manuractu Dual-In-Line Package	6					S (Continued) Dual-In-Line Packa	no Ate	
	Product No			1	10		Product No.		Description Dual-III-Line Facks	711	100
48320		14	Triple 3-input NAND gate\$.1		\$.10		74HC373★		Octal D-type flip-flop tri-state\$.45		
48750	74S32	14	Quad 2-input OR gate		.10		74HC374	20	Octal D-type flip-flop edge-trig tri-state 45		
48944	74S74	14	Dual D flip-flop		.10		74HC393	14	Dual 4-bit binary counter		
			256-bit (32x8) PROM O.C. (27S18) 5.9		5.39		74HC540	20	Octal invert. buffer/line driver tri-state		.59
	74S188	16					74HC541	20	Octal buffer/line driver tri-state		
48557	74S189	16	64-bit (16x4) RAM tri-state (27S03) 3.9		3.49	46076	74HC573	20	Octal D-type flip-flop tri-state	.69	.59
48696	74S287	16	1K-bit (256x4) PROM tri-state (TBP24S10)6.9		6.25	46084	74HC574	20	Octal D-type flip-flop tri-state	.59	.49
48717	74S288	16	256-bit (32x8) PROM tri-state (TBP18S030N)4.9	95	4.49	88090	74HC590	16	8-bit binary counter with output reg. tri-state99	.89	.79
48768	74S373	20	Octal D-type flip-flop tri-state3	39	.29	46105	74HC595	16	8-bit serial-to-parallel shift reg. tri-state99	.89	.79
48776	74S374	20	Octal D flip-flop edge-triggered tri-state5	59	.39	46113	74HC688	20	8-bit mag. comparator	.69	.59
48805	74S387	16	1K-bit (256x4) PROM O.C. (TBP24SA10N)5.9	95	5.39	45891	74HC4017	16	Decade ctr./div. with 10 decoded outputs79	.69	.59
52513	74S428	28	System contr./bus driver (8228)5	59	.39	45903	74HC4020	16	14-stage binary counter69	.59	.49
48864	74S472	20	4K-bit (512x8) PROM tri-state (TBP28S42N)8.9	95	5.95	45920	74HC4040	16	12-stage binary counter	.59	.49
48910	74S571	16	2K-bit (512x4) PROM tri-state (AM27S13)6.9	95	6.25	45938	74HC4046	16	CMOS phase lock loop99	.89	.79
48928	74S573	18	4K-bit (1024x4) PROM tri-state (53S441J)2.9	95	2.75	88102	74HC4051	16	Single 8-channel multi/demultiplexer89	.79	.69
7/14	COO Se	orio	5 11 11 5 1	A series		45962	74HC4060	16	14-stage binary counter	.65	.55
			Dual-III-LITIE Package	3311	1111	45971	74HC4066	14	Quad analog switch	.49	.45
	Product No		Description 1	10	100	46009	74HC4514 S	S-24	4/16-line decoder with latch (.3"W)1.95	1.75	1.55
	74HC00★		,	5.17	\$.15	46017	74HC4538	16	Dual retrig. mono. multivibrator59	.49	.39
45188	74HC02	14	, ,	.17	.15	74H	CT00 S	erie	Dual-In-Line Packac	e 🎶	
45209	74HC04★	14	,	.17	.15						400
45225	74HC08	14		.17	.15	-	Product No.		Description 1	10	
	74HC10	14		.17	.12		74HCT00	14	Quad 2-input NAND gate (Y560820T)\$.25		
	74HC11	14		.17	.12		74HCT04	14	Hex inverter		
45364	74HC14★	14	Hex inverter Schmitt trigger25	.22	.19	44901	74HCT08 74HCT14	14 14	Quad 2-input AND gate		
45786	74HC30	14	'	.22	.19		74HCT14 74HCT32	14	Hex inverter Schmitt trigger		
45794	74HC32	14	1 3	.17	.15		74HCT74	14	Dual D flip-flop		
46130	74HC74★	14	Dual D flip-flop29	.25	.22		74HCT138	16	3 to 8 decoder/demultiplexer		
	74HC85	16	3	.49	.45		74HCT139	16	2 to 4 decoder/demultiplexer		
46181	74HC86	14	ŭ	.29	.25		74HCT154	24	4 to 16 decoder/demultiplexer		
	74HC123	16	Dual retrig. monostable multivibrator35	.29	.25		74HCT240	20	Octal inverting line driver tri-state		
	74HC125	14		.35	.29		74HCT244	20	Octal driver tri-state39		
45321	74HC132	14	Quad 2-input NAND Schmitt trigger35	.29	.25		74HCT245		Octal transceiver tri-state45		
	74HC138	16	'	.29	.25		74HCT273		Octal D-type flip-flop with clear49		.35
45356	74HC139	16	'	.29	.25			20	Octal D-type flip-flop tri-state		.29
45401	74HC154	S-24	, ,	1.09	.99		74HCT374	20	Octal D-type flip-flop edge-trig. TS		.29
	74HC154W			1.35	1.09	99303	74HCT541	20	Octal buffer/line driver tri-state	.59	.49
	74HC157	16	, ,	.25	.22	45090	74HCT573	20	Octal D-type latched flip-flop tri-state	.69	.59
	74HC161	16		.29	.25	45102	74HCT574	20	Octal D-type flip-flop edge-trigger tri-state79	.69	.59
	74HC163	16	Synchronous 4-bit counter	.25	.19	45129	74HCT688	20	8-bit magnitude comparator	.69	.59
45487	74HC164	14	•	.35	.29	Con	modore	e/6	000 Series Dual-In-Line Packag		10.00
45495	74HC165	16	v	.29	.25				Dual-III-Lille Packag	- 111	11111
45508	74HC174	16	· ·	.29	.19		Product No.		Description	1	
45541	74HC192	16	· ·	1.49 oo	1.39	43191		40	MPU with internal clock (1MHz)		
45559	74HC193	16	* '	.89	.79		65C02	40	MPU with internal clock (CMOS)		
45604	74HC221	16		.55	.45	43254	6522	40	VIA (versatile interface adapter) 1MHz		
	74HC240	20	•	.45	.39	43297	6532	40	128x8 RAM, I/O timer array		
	74HC244	20	Octal transcoiver tri state	.35	.29	43318	6551	28	ACIA (asynchronous comm. interface adapter)		
45671	74HC245	20		.35	.29	43182		28	ACIA (asynchronous comm. interface adapter) CMOS		
45/43	74HC273	20	Octal D-type flip-flop with clear	.59	.49	52951	ช564	48	VIC (video interface chip for C128)	39	.25

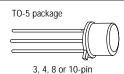


II (ien	erators		Dual-In-Line Pag	kane	No.		CD4	000 Sei	ries	(Continued) Dual-In-Line Package	teres.
	Product No.		Description	Mage	1	10		Product No.	Pins	Description 1 10	100
51879			Wave form generator/volt. control OSC	\$3	3.49	\$3.19			16	Binary up/down counter\$.49 \$.45	\$.39
HΔR	Τς/ΠςΔΙ	QTc.	DUARTS/MUARTS Dual-In-Line Pack	200	1		13565	CD4518	16	Dual BCD up counter	.39
					140	#1 2F	13581	CD4520	16	Dual binary up counter	.35
39634 43158	2651 6402	28 40	Communication Chip (USART) CMOS/LSI UART (TR1863)				13590	CD4522	16	Program. BCD divide-by-N counter	.59
27588	NS16450N		ACE (IBM-AT software compat.)			4.49 3.59	13602	CD4526	16	Divide-by-N counter (binary)6959	.49
27570	NS16C450N		CMOS ACE (IBM-AT software compat.) (82C4			4.49	13611	CD4528	16	Dual monostable multivibrator	.49
	NS16550AN		Universal asynch. rcvr/trans. w/ FIFOs (PC16550					CD4538	16	Dual precision monostable multivibrator49 .45	.39
				,			13688	CD4541	14	Oscillator/programmable timer	.39
	1000 S e			. J	3881	1111	13696 13709	CD4543 CD4553	16 16	BCD to 7-segment decoder (LCD)	.49 2.49
	Product No.			1	10	100	13707	CD4556	16	Dual binary 1 of 4 decoder inverter49 .45	.29
	CD4001★	14	Quad 2-input NOR gate\$.2		5.19	\$.17		CD4584	14	Hex Schmitt trigger (74C14) 4010639 .35	.29
12597 12634	CD4007 CD4011★	14	Dual comp. pair with inverter		.19 .19	.17 .17	Part No.	Description		See were 22 for datalle	10
12677	CD4011★ CD4013★	14 14	Quad 2-input NAND gate		.19	.17	84970		···	\$99	71.95
12706	CD4015	16	Dual 4-stage static shift register		.25	.22	130403				57.95
12722		14	Quad bilateral switch (74016)		.25	.22	Har				11111
	CD4017★	16	Decade counter/divider		.29	.25	Пап	ris/Inte	1211	Dual-In-Line Package	THIT
	CD4018	16	Presettable divide-by-N counter		.45	.39	Part No.	Product No.	Pins	Description 1	10
	CD4020	16	14-stage binary/ripple counter		.39	.35	43748	7106CPL	40	3 1/2-digit LCD single-chip A/D converter\$2.39	\$2.19
12829	CD4021	16	8-stage static shift register		.29	.25	43756	7107CPL	40	3 1/2-digit LED single-chip A/D converter2.39	2.19
54666	CD4022	16	Div. by 8-counter/driver w/8-decoded outputs6	9	.59	.49	43764	7109CPL	40	12-bit A/D converter 5.95	5.39
12845	CD4023	14	Triple 3-input NAND gate	5	.19	.15	43801	7217AIPI	28	4-digit LED up/down counter (com. cathode)8.95	7.95
12853	CD4024	14	7-stage binary counter3	5	.29	.25	51140	7555IPA	8	CMOS timer (LM555CN)	.49
12870	CD4025	14	Triple 3-input NOR gate	5	.29	.25	51174	7660CPA	8	CMOS volt converter (+5 to \pm 5V) (M660AN)1.09	.99
12888	CD4027	16	Dual JK master-slave flip-flop2	5	.19	.17	172152	8020ACPD	14	Quad current switch for D/A conversion	.39
12909	CD4028	16	BCD-to-decimal decoder	9	.25	.22	51879	8038CCPD	14	Waveform generator/volt control OSC3.49	3.19
12925	CD4029	16	Presettable up/down counter		.45	.39	Mot	orola S	erie	S Dual-In-Line Package	1111
12950	CD4040	16	12-stage binary/ripple counter		.35	.29					11111
12984						10					40 -0
	CD4042	16	Quad clocked D latch		.29	.19		MC846P	14	Quad 2-input gate	
12992	CD4043	16	Quad NOR R-S latch tri-state	9	.25	.17	24942	MC1350P	8	Video IF amp (12V operation)	1.19
13004	CD4043 CD4044	16 16	Quad NOR R-S latch tri-state	9 9	.25 .45	.17 .39	24942 14912	MC1350P MC1408-6	8 16	Video IF amp (12V operation) 1.29 8-bit D to A converter (DAC0806LCN) 1.49	1.19 1.29
13004 13012	CD4043 CD4044 CD4046	16 16 16	Quad NOR R-S latch tri-state .2 Quad 3-state NAND R-S latch tri-state .4 Micropower phase-locked loop .4	9 9 9	.25 .45 .45	.17 .39 .39	24942 14912 14947	MC1350P MC1408-6 MC1408-8	8 16 16	Video IF amp (12V operation) 1.29 8-bit D to A converter (DAC0806LCN) 1.49 8-bit D to A converter (DAC0808LCN) 1.49	1.19 1.29 1.29
13004 13012 13039	CD4043 CD4044 CD4046 CD4047	16 16 16 14	Quad NOR R-S latch tri-state 2 Quad 3-state NAND R-S latch tri-state 4 Micropower phase-locked loop 4 Monostable/astable multivibrator 5	9 9 9 9	.25 .45 .45 .49	.17 .39 .39 .45	24942 14912 14947 118578	MC1350P MC1408-6 MC1408-8 MC1495L	8 16 16 14	Video IF amp (12V operation) 1.29 8-bit D to A converter (DAC0806LCN) 1.49 8-bit D to A converter (DAC0808LCN) 1.49 Linear four quadrant multiplier 8.95	1.19 1.29 1.29 7.95
13004 13012 13039 13055	CD4043 CD4044 CD4046 CD4047 CD4049★	16 16 16 14 16	Quad NOR R-S latch tri-state 2 Quad 3-state NAND R-S latch tri-state 4 Micropower phase-locked loop 4 Monostable/astable multivibrator 5 Hex/buffer/converter (inverting) 2	9 9 9 9 5	.25 .45 .45 .49	.17 .39 .39 .45	24942 14912 14947 118578 23211	MC1350P MC1408-6 MC1408-8 MC1495L MC1496P	8 16 16 14 14	Video IF amp (12V operation) 1.29 8-bit D to A converter (DAC0806LCN) 1.49 8-bit D to A converter (DAC0808LCN) 1.49 Linear four quadrant multiplier 8.95 Balanced modulator/demodulator (LM1496N) 89	1.19 1.29 1.29 7.95 .79
13004 13012 13039 13055 13071	CD4043 CD4044 CD4046 CD4047 CD4049 *	16 16 16 14 16	Quad NOR R-S latch tri-state 2 Quad 3-state NAND R-S latch tri-state 4 Micropower phase-locked loop 4 Monostable/astable multivibrator 5 Hex/buffer/converter (inverting) 2 Hex/buffer/converter (N-inverting) 2	9 9 9 9 5 5	.25 .45 .45 .49 .19	.17 .39 .39 .45 .17	24942 14912 14947 118578 23211 25216	MC1350P MC1408-6 MC1408-8 MC1495L MC1496P MC3479P	8 16 16 14	Video IF amp (12V operation)	1.19 1.29 1.29 7.95
13004 13012 13039 13055 13071 13098	CD4043 CD4044 CD4046 CD4047 CD4049★	16 16 16 14 16 16	Quad NOR R-S latch tri-state 2 Quad 3-state NAND R-S latch tri-state 4 Micropower phase-locked loop 4 Monostable/astable multivibrator 5 Hex/buffer/converter (inverting) 2	9 9 9 9 5 5	.25 .45 .45 .49 .19 .19	.17 .39 .39 .45 .17 .17	24942 14912 14947 118578 23211 25216 25232	MC1350P MC1408-6 MC1408-8 MC1495L MC1496P	8 16 16 14 14	Video IF amp (12V operation) 1.29 8-bit D to A converter (DAC0806LCN) 1.49 8-bit D to A converter (DAC0808LCN) 1.49 Linear four quadrant multiplier 8.95 Balanced modulator/demodulator (LM1496N) 89	1.19 1.29 1.29 7.95 .79 4.49
13004 13012 13039 13055 13071 13098	CD4043 CD4044 CD4046 CD4047 CD4049 * CD4050 * CD4051 *	16 16 16 14 16	Quad NOR R-S latch tri-state 2 Quad 3-state NAND R-S latch tri-state 4 Micropower phase-locked loop 4 Monostable/astable multivibrator 5 Hex/buffer/converter (inverting) 2 Hex/buffer/converter (N-inverting) 2 Single 8-channel multi./demultiplexer 4 Diff. 4-channel multi./demultiplexer 4	9 9 9 9 5 5 5	.25 .45 .45 .49 .19	.17 .39 .39 .45 .17	24942 14912 14947 118578 23211 25216 25232 25259	MC1350P MC1408-6 MC1408-8 MC1495L MC1496P MC3479P MC3486P	8 16 16 14 14 16 16	Video IF amp (12V operation)	1.19 1.29 1.29 7.95 .79 4.49
13004 13012 13039 13055 13071 13098 13119	CD4043 CD4044 CD4046 CD4047 CD4049 ★ CD4050 ★ CD4051 ★ CD4052 ★	16 16 16 14 16 16 16	Quad NOR R-S latch tri-state .2 Quad 3-state NAND R-S latch tri-state .4 Micropower phase-locked loop .4 Monostable/astable multivibrator .5 Hex/buffer/converter (inverting) .2 Hex/buffer/converter (N-inverting) .2 Single 8-channel multi./demultiplexer .4	9 9 9 9 5 5 5 5	.25 .45 .45 .49 .19 .19 .39	.17 .39 .39 .45 .17 .17 .35	24942 14912 14947 118578 23211 25216 25232 25259 25275	MC1350P MC1408-6 MC1408-8 MC1495L MC1496P MC3479P MC3486P MC3487P	8 16 16 14 14 16 16	Video IF amp (12V operation)	1.19 1.29 1.29 7.95 .79 4.49 .59 .59 7.95
13004 13012 13039 13055 13071 13098 13119 13127	CD4043 CD4044 CD4046 CD4047 CD4049 ★ CD4050 ★ CD4052 ★ CD4053 ★ CD4060	16 16 16 14 16 16 16 16	Quad NOR R-S latch tri-state 2 Quad 3-state NAND R-S latch tri-state 4 Micropower phase-locked loop 4 Monostable/astable multivibrator 5 Hex/buffer/converter (inverting) 2 Hex/buffer/converter (N-inverting) 2 Single 8-channel multi./demultiplexer 4 Diff. 4-channel multi./demultiplexer 4 Triple 2-channel multi./demultiplexer 4	9 9 9 5 5 5 5 5	.25 .45 .45 .49 .19 .19 .39 .39	.17 .39 .45 .17 .17 .35 .25	24942 14912 14947 118578 23211 25216 25232 25259 25275 25355	MC1350P MC1408-6 MC1408-8 MC1495L MC1496P MC3479P MC3486P MC3487P MC4044P	8 16 16 14 14 16 16 16	Video IF amp (12V operation)	1.19 1.29 1.29 7.95 .79 4.49 .59 7.95 13.95
13004 13012 13039 13055 13071 13098 13119 13127 13151 13186	CD4043 CD4044 CD4046 CD4047 CD4049 ★ CD4050 ★ CD4052 ★ CD4053 ★ CD4060	16 16 16 14 16 16 16 16 16	Quad NOR R-S latch tri-state 2 Quad 3-state NAND R-S latch tri-state 4 Micropower phase-locked loop 4 Monostable/astable multivibrator 5 Hex/buffer/converter (inverting) 2 Hex/buffer/converter (N-inverting) 2 Single 8-channel multi./demultiplexer 4 Diff. 4-channel multi./demultiplexer 4 Triple 2-channel multi./demultiplexer 4 14-stage ripple-carry binary 4	9 9 9 5 5 5 5 5 5	.25 .45 .45 .49 .19 .39 .39 .39	.17 .39 .45 .17 .17 .35 .25 .35	24942 14912 14947 118578 23211 25216 25232 25259 25275 25355 25021	MC1350P MC1408-6 MC1408-8 MC1495L MC1496P MC3479P MC3486P MC3487P MC4044P MC68701	8 16 16 14 14 16 16 16 14 40	Video IF amp (12V operation)	1.19 1.29 1.29 7.95 .79 4.49 .59 7.95 13.95 7.95
13004 13012 13039 13055 13071 13098 13119 13127 13151 13186	CD4043 CD4044 CD4046 CD4047 CD4049 * CD4050 * CD4052 * CD4053 * CD4060 CD4066 *	16 16 14 16 16 16 16 16 16	Quad NOR R-S latch tri-state 2 Quad 3-state NAND R-S latch tri-state 4 Micropower phase-locked loop 4 Monostable/astable multivibrator 5 Hex/buffer/converter (inverting) 2 Hex/buffer/converter (N-inverting) 2 Single 8-channel multi./demultiplexer 4 Diff. 4-channel multi./demultiplexer 4 Triple 2-channel multi./demultiplexer 4 14-stage ripple-carry binary 4 Quad bilateral switch 3	9 9 9 5 5 5 5 5 5 5 7	.25 .45 .49 .19 .39 .39 .39 .45	.17 .39 .39 .45 .17 .17 .35 .25 .35	24942 14912 14947 118578 23211 25216 25232 25259 25275 25355 25021 25064	MC1350P MC1408-6 MC1408-8 MC1495L MC1496P MC3479P MC3486P MC3487P MC4044P MC68701 MC14411P	8 16 16 14 14 16 16 16 14 40 24	Video IF amp (12V operation)	1.19 1.29 7.95 .79 4.49 .59 7.95 13.95 7.95 5.39
13004 13012 13039 13055 13071 13098 13119 13127 13151 13186 13215	CD4043 CD4044 CD4046 CD4047 CD4049 ★ CD4050 ★ CD4051 ★ CD4053 ★ CD4060 CD4066 ★ CD4067	16 16 14 16 16 16 16 16 16 14 24	Quad NOR R-S latch tri-state 2 Quad 3-state NAND R-S latch tri-state 4 Micropower phase-locked loop 4 Monostable/astable multivibrator 5 Hex/buffer/converter (inverting) 2 Hex/buffer/converter (N-inverting) 2 Single 8-channel multi./demultiplexer 4 Diff. 4-channel multi./demultiplexer 4 Triple 2-channel multi./demultiplexer 4 14-stage ripple-carry binary 4 Quad bilateral switch 3 16-channel analog multi/demultiplexer 1.7	9 9 9 9 5 5 5 5 5 5 5 5 5 5	.25 .45 .49 .19 .39 .39 .39 .45 .29	.17 .39 .45 .17 .17 .35 .25 .35 .39 .25	24942 14912 14947 118578 23211 25216 25232 25259 25275 25355 25021 25064 118586	MC1350P MC1408-6 MC1408-8 MC1495L MC1496P MC3479P MC3486P MC3487P MC4044P MC68701 MC14411P MC14490P	8 16 16 14 14 16 16 16 14 40 24 16 22 28	Video IF amp (12V operation)	1.19 1.29 1.29 7.95 .79 4.49 .59 .59 7.95 13.95 7.95 5.39 5.39 1.75
13004 13012 13039 13055 13071 13098 13119 13127 13151 13186 13215 13231	CD4043 CD4044 CD4046 CD4047 CD4049 ★ CD4050 ★ CD4052 ★ CD4053 ★ CD4060 CD4066 ★ CD4067 CD4069 ★	16 16 16 14 16 16 16 16 16 14 24	Quad NOR R-S latch tri-state 2 Quad 3-state NAND R-S latch tri-state 4 Micropower phase-locked loop 4 Monostable/astable multivibrator 5 Hex/buffer/converter (inverting) 2 Hex/buffer/converter (N-inverting) 2 Single 8-channel multi./demultiplexer 4 Diff. 4-channel multi./demultiplexer 4 Triple 2-channel multi./demultiplexer 4 14-stage ripple-carry binary 4 Quad bilateral switch 3 16-channel analog multi/demultiplexer 1.7 Hex inverter (74C04) 2	9 9 9 9 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	.25 .45 .49 .19 .39 .39 .45 .29 l.55	.17 .39 .45 .17 .17 .35 .25 .39 .25	24942 14912 14947 118578 23211 25216 25232 25259 25275 25355 25021 25064 118586 25099	MC1350P MC1408-6 MC1408-8 MC1495L MC1496P MC3479P MC3486P MC3487P MC4044P MC68701 MC14411P MC14490P MC145151F	8 16 16 14 14 16 16 16 14 40 24 16 22 28	Video IF amp (12V operation)	1.19 1.29 1.29 7.95 .79 4.49 .59 .59 7.95 13.95 7.95 5.39 5.39 1.75
13004 13012 13039 13055 13071 13098 13119 13127 13151 13186 13215 13231 13258	CD4043 CD4044 CD4046 CD4047 CD4049 ★ CD4050 ★ CD4052 ★ CD4053 ★ CD4060 CD4066 ★ CD4067 CD4069 ★ CD4070	16 16 16 14 16 16 16 16 16 14 24 14	Quad NOR R-S latch tri-state 2 Quad 3-state NAND R-S latch tri-state 4 Micropower phase-locked loop 4 Monostable/astable multivibrator 5 Hex/buffer/converter (inverting) 2 Hex/buffer/converter (N-inverting) 2 Single 8-channel multi./demultiplexer 4 Diff. 4-channel multi./demultiplexer 4 Triple 2-channel multi./demultiplexer 4 14-stage ripple-carry binary 4 Quad bilateral switch 3 16-channel analog multi/demultiplexer 1.7 Hex inverter (74C04) 2 Quad EXCLUSIVE-OR gate (74C86) 2 Quad 2-input OR gate 2 Quad 2-input AND gate 2	9 9 9 9 9 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	.25 .45 .49 .19 .39 .39 .45 .29 l.55 .19	.17 .39 .39 .45 .17 .17 .35 .25 .35 .25 .17 .15 .17	24942 14912 14947 118578 23211 25216 25232 25259 25275 25355 25021 25064 118586 25099 25101	MC1350P MC1408-6 MC1408-8 MC1495L MC1496P MC3479P MC3486P MC3487P MC4044P MC68701 MC14411P MC14490P MC145151F MC145406F MC146818	8 16 16 14 14 16 16 16 14 40 24 16 22 28 21 16 22	Video IF amp (12V operation)	1.19 1.29 1.29 7.95 .79 4.49 .59 .59 7.95 13.95 7.95 5.39 5.39 1.75
13004 13012 13039 13055 13071 13098 13119 13127 13151 13186 13215 13231 13258 13274	CD4043 CD4044 CD4046 CD4047 CD4049 ★ CD4050 ★ CD4052 ★ CD4053 ★ CD4060 CD4066 ★ CD4067 CD4069 ★ CD4071	16 16 16 14 16 16 16 16 16 14 24 14 14	Quad NOR R-S latch tri-state 2 Quad 3-state NAND R-S latch tri-state 4 Micropower phase-locked loop 4 Monostable/astable multivibrator 5 Hex/buffer/converter (inverting) 2 Hex/buffer/converter (N-inverting) 2 Single 8-channel multi./demultiplexer 4 Diff. 4-channel multi./demultiplexer 4 Triple 2-channel multi./demultiplexer 4 14-stage ripple-carry binary 4 Quad bilateral switch 3 16-channel analog multi/demultiplexer 1.7 Hex inverter (74C04) 2 Quad EXCLUSIVE-OR gate (74C86) 2 Quad 2-input OR gate 2 Quad 2-input AND gate 2 Quad 2-input NAND Schmitt trigger 2	9 9 9 9 9 9 5 5 5 5 5 5 5 5 5 5 5 5 5 5	.25 .45 .49 .19 .39 .39 .45 .29 !.55 .19	.17 .39 .39 .45 .17 .35 .25 .35 .39 .25 .17 .15 .17 .17	24942 14912 14947 118578 23211 25216 25232 25259 25275 25355 25021 25064 118586 25099 25101	MC1350P MC1408-6 MC1408-8 MC1495L MC1496P MC3479P MC3486P MC3487P MC4044P MC68701 MC14411P MC14490P MC145151F MC145406F MC146818	8 16 16 14 14 16 16 16 14 40 24 16 22 28 21 24 24	Video IF amp (12V operation) 1.29 8-bit D to A converter (DAC0806LCN) 1.49 8-bit D to A converter (DAC0808LCN) 1.49 Linear four quadrant multiplier 8.95 Balanced modulator/demodulator (LM1496N) 89 Biphase stepper motor driver 4.95 Quad EIA-422/423 line rec. with 3-state outputs 69 Quad EIA-422 line driver with 3-state outputs 69 Frequency phase detector (11C44) 8.95 8-bit EPROM (2048 USA) MPU w/ 128B RAM & I/O 15.95 Bit rate frequency generator 8.95 Hex contact bounce eliminator 5.95 Parallel input PLL freq. synthesizer 5.95 RS232-C/V.28 driver/rec. (CMOS)(75C1406N) 1.95 Real time clock plus RAM 5.95	1.19 1.29 1.29 7.95 .79 4.49 .59 7.95 13.95 7.95 5.39 5.39 1.75 5.39
13004 13012 13039 13055 13071 13098 13119 13127 13151 13215 13231 13258 13274 13354 13400 13426	CD4043 CD4044 CD4046 CD4047 CD4049 * CD4050 * CD4053 * CD4060 CD4066 * CD4067 CD4069 * CD4071 CD4081 * CD4094 CD4094	16 16 14 16 16 16 16 16 14 24 14 14 14	Quad NOR R-S latch tri-state2Quad 3-state NAND R-S latch tri-state4Micropower phase-locked loop4Monostable/astable multivibrator5Hex/buffer/converter (inverting)2Hex/buffer/converter (N-inverting)2Single 8-channel multi./demultiplexer4Diff. 4-channel multi./demultiplexer4Triple 2-channel multi./demultiplexer414-stage ripple-carry binary4Quad bilateral switch316-channel analog multi/demultiplexer1.7Hex inverter (74C04)2Quad EXCLUSIVE-OR gate (74C86)2Quad 2-input OR gate2Quad 2-input NAND gate2Quad 2-input NAND Schmitt trigger28-stage shift-and-store bus register4	9 9 9 9 9 9 5 5 5 5 5 5 5 5 5 5 5 5 5 5	.25 .45 .49 .19 .39 .39 .45 .29 !.55 .19 .19 .19 .45	.17 .39 .39 .45 .17 .35 .25 .35 .39 .25 .17 .15 .17 .17 .22 .39	24942 14912 14947 118578 23211 25216 25232 25259 25275 25355 25021 25064 118586 25099 25101 Sigir	MC1350P MC1408-6 MC1408-8 MC1495L MC1496P MC3479P MC3486P MC3487P MC4044P MC68701 MC14411P MC1445151F MC145406F MC146818 MC146818	8 16 16 14 14 16 16 16 14 40 24 16 22 16 24 Serie	Video IF amp (12V operation) 1.29 8-bit D to A converter (DAC0806LCN) 1.49 8-bit D to A converter (DAC0808LCN) 1.49 Linear four quadrant multiplier 8.95 Balanced modulator/demodulator (LM1496N) 89 Biphase stepper motor driver 4.95 Quad EIA-422/423 line rec. with 3-state outputs 69 Quad EIA-422 line driver with 3-state outputs 69 Frequency phase detector (11C44) 8.95 8-bit EPROM (2048 USA) MPU w/ 128B RAM & I/O 15.95 Bit rate frequency generator 8.95 Hex contact bounce eliminator 5.95 Parallel input PLL freq. synthesizer 5.95 RS232-C/V.28 driver/rec. (CMOS)(75C1406N) 1.95 Real time clock plus RAM 5.95 Dual-In-Line Package 256-bit PROM open collector \$6.95	1.19 1.29 1.29 7.95 .79 4.49 .59 7.95 13.95 7.95 5.39 5.39 1.75 5.39 \$6.25
13004 13012 13039 13055 13071 13098 13119 13127 13151 13215 13231 13258 13274 13354 13400 13426 13434	CD4043 CD4044 CD4046 CD4047 CD4050 ★ CD4051 ★ CD4053 ★ CD4060 CD4066 ★ CD4067 CD4069 ★ CD4071 CD4081 ★ CD4093 ★ CD4098	16 16 14 16 16 16 16 16 14 24 14 14 14 14 16 16	Quad NOR R-S latch tri-state 2 Quad 3-state NAND R-S latch tri-state 4 Micropower phase-locked loop 4 Monostable/astable multivibrator 5 Hex/buffer/converter (inverting) 2 Hex/buffer/converter (N-inverting) 2 Single 8-channel multi./demultiplexer 4 Diff. 4-channel multi./demultiplexer 4 Triple 2-channel multi./demultiplexer 4 14-stage ripple-carry binary 4 Quad bilateral switch 3 16-channel analog multi/demultiplexer 1.7 Hex inverter (74C04) 2 Quad EXCLUSIVE-OR gate (74C86) 2 Quad 2-input OR gate 2 Quad 2-input AND gate 2 Quad 2-input NAND Schmitt trigger 2 8-stage shift-and-store bus register 4 CMOS/MOS dual mono. multivibrator 4	9 9 9 9 9 5 5 5 5 5 5 5 5 5 5 5 9 9 9	.25 .45 .49 .19 .39 .39 .45 .29 .155 .19 .19 .19 .45 .45	.17 .39 .39 .45 .17 .17 .35 .25 .39 .25 1.35 .17 .15 .17 .22 .39 .39	24942 14912 14947 118578 23211 25216 25232 25259 25275 25021 25064 118586 25099 25101 Sigir 27844 27764	MC1350P MC1408-6 MC1408-8 MC1495L MC1496P MC3479P MC3486P MC3487P MC4044P MC68701 MC14411P MC14490P MC145151F MC145406F MC146818 N82S23 N82S123	8 16 16 14 14 16 16 16 14 40 24 16 28 21 6 24 6 16 16 16	Video IF amp (12V operation) 1.29 8-bit D to A converter (DAC0806LCN) 1.49 8-bit D to A converter (DAC0808LCN) 1.49 Linear four quadrant multiplier 8.95 Balanced modulator/demodulator (LM1496N) 89 Biphase stepper motor driver 4.95 Quad EIA-422/423 line rec. with 3-state outputs 69 Guad EIA-422 line driver with 3-state outputs 69 Frequency phase detector (11C44) 8.95 8-bit EPROM (2048 USA) MPU w/ 128B RAM & I/O 15.95 Bit rate frequency generator 8.95 Hex contact bounce eliminator 5.95 Parallel input PLL freq. synthesizer 5.95 RS232-C/V.28 driver/rec. (CMOS)(75C1406N) 1.95 Real time clock plus RAM 5.95 Dual-In-Line Package 256-bit PROM open collector \$6.95 256-bit PROM (32x8 tri-state) (27S19) 6.95	1.19 1.29 7.95 .79 4.49 .59 7.95 13.95 7.95 5.39 5.39 1.75 5.39 \$6.25
13004 13012 13039 13055 13071 13098 13119 13127 13151 13215 13231 13258 13274 13354 13400 13426 13434 13442	CD4043 CD4044 CD4046 CD4047 CD4049 * CD4050 * CD4051 * CD4053 * CD4060 CD4066 * CD4067 CD4069 * CD4071 CD4081 * CD4093 * CD4098 CD4099 CD4099	16 16 14 16 16 16 16 16 14 24 14 14 14 14 16 16 16	Quad NOR R-S latch tri-state	9 9 9 9 5 5 5 5 5 5 5 5 5 5 5 5 9 9 9 9	.25 .45 .49 .19 .39 .39 .45 .29 .55 .19 .19 .25 .45 .45	.17 .39 .45 .17 .17 .35 .25 .35 .25 .135 .17 .15 .17 .22 .39 .39	24942 14912 14947 118578 23211 25216 25232 25259 25275 25021 25064 118586 25099 25101 Sigir 27844 27764 27772	MC1350P MC1408-6 MC1408-8 MC1495L MC1496P MC3479P MC3486P MC3487P MC4044P MC68701 MC14411P MC14490P MC145151F MC145406F MC146818 Cetics S N82S23 N82S123 N82S126	8 16 16 14 14 16 16 16 16 14 40 24 16 22 16 24 Cerie 16 16 16	Video IF amp (12V operation) 1.29 8-bit D to A converter (DAC0806LCN) 1.49 8-bit D to A converter (DAC0808LCN) 1.49 Linear four quadrant multiplier 8.95 Balanced modulator/demodulator (LM1496N) 89 Biphase stepper motor driver 4.95 Quad EIA-422/423 line rec. with 3-state outputs 69 Quad EIA-422 line driver with 3-state outputs 69 Frequency phase detector (11C44) 8.95 8-bit EPROM (2048 USA) MPU w/ 128B RAM & I/O 15.95 Bit rate frequency generator 8.95 Hex contact bounce eliminator 5.95 Parallel input PLL freq. synthesizer 5.95 RS232-C/V.28 driver/rec. (CMOS)(75C1406N) 1.195 Real time clock plus RAM 5.95 Dual-In-Line Package 256-bit PROM open collector \$6.95 256-bit PROM (32x8 tri-state) (27S19) 6.95 1024-bit PROM (256x4 open collector) (27S20) 7.95	1.19 1.29 7.95 .79 4.49 .59 7.95 13.95 7.95 5.39 1.75 5.39 \$6.25 6.25 6.95
13004 13012 13039 13055 13071 13098 13119 13127 13151 13215 13231 13258 13274 13354 13400 13426 13434 13442 44257	CD4043 CD4044 CD4046 CD4047 CD4050 ★ CD4051 ★ CD4052 ★ CD4066 ★ CD4067 CD4067 CD4069 ★ CD4071 CD4081 ★ CD4093 ★ CD4098 CD4099 CD40106	16 16 14 16 16 16 16 16 14 24 14 14 14 14 16 16 16	Quad NOR R-S latch tri-state 2 Quad 3-state NAND R-S latch tri-state 4 Micropower phase-locked loop 4 Monostable/astable multivibrator 5 Hex/buffer/converter (inverting) 2 Hex/buffer/converter (N-inverting) 2 Single 8-channel multi./demultiplexer 4 Diff. 4-channel multi./demultiplexer 4 Triple 2-channel multi./demultiplexer 4 14-stage ripple-carry binary 4 Quad bilateral switch 3 16-channel analog multi/demultiplexer 1.7 Hex inverter (74C04) 2 Quad EXCLUSIVE-OR gate (74C86) 2 Quad 2-input OR gate 2 Quad 2-input AND gate 2 Quad 2-input NAND Schmitt trigger 2 8-stage shift-and-store bus register 4 CMOS/MOS dual mono. multivibrator 4 8-bit addressable latch 4 Hex inverter Schmitt trigger (74C14) 3	9 9 9 9 5 5 5 5 5 5 5 5 5 5 5 5 9 9 9 9	.25 .45 .49 .19 .39 .39 .39 .45 .29 .155 .19 .19 .25 .45 .45 .45 .45	.17 .39 .45 .17 .17 .35 .25 .39 .25 1.35 .17 .15 .17 .17 .22 .39 .39 .39 .29	24942 14912 14947 118578 23211 25216 25232 25259 25275 25051 25064 118586 25099 25101 Sigir 27844 277764 27772 27781	MC1350P MC1408-6 MC1408-8 MC1495L MC1496P MC3479P MC3486P MC3487P MC4044P MC68701 MC14411P MC145151F MC145406F MC146818 MC146818 MC146818 MC146818 MC146818	8 16 16 14 14 16 16 16 16 14 40 24 16 22 16 16 16 16 16	Video IF amp (12V operation) 1.29 8-bit D to A converter (DAC0806LCN) 1.49 8-bit D to A converter (DAC0808LCN) 1.49 Linear four quadrant multiplier 8.95 Balanced modulator/demodulator (LM1496N) 89 Biphase stepper motor driver 4.95 Quad EIA-422/423 line rec. with 3-state outputs 69 Prequency phase detector (11C44) 8.95 8-bit EPROM (2048 USA) MPU w/ 128B RAM & I/O 15.95 Bit rate frequency generator 8.95 Hex contact bounce eliminator 5.95 Parallel input PLL freq. synthesizer 5.95 RS232-C/V.28 driver/rec. (CMOS)(75C1406N) 1.195 Real time clock plus RAM 5.95 Seal time clock plus RAM 5.95 Sobit PROM open collector \$6.95 256-bit PROM (32x8 tri-state) (27S19) 6.95 1024-bit PROM (256x4 open collector) (27S20) 7.95 1024-bit PROM (256x4 tri-state) (AM27S21) 6.95	1.19 1.29 1.29 7.95 .79 4.49 .59 7.95 13.95 7.95 5.39 1.75 5.39 \$6.25 6.25 6.95 6.25
13004 13012 13039 13055 13071 13098 13119 13127 13151 13215 13231 13258 13274 13354 13400 13426 13434 13442 44257 13469	CD4043 CD4044 CD4046 CD4047 CD4050 * CD4051 * CD4052 * CD4066 * CD4066 * CD4067 CD4069 * CD4071 CD4081 * CD4093 * CD4094 CD4098 CD4099 CD40106 CD4503	16 16 14 16 16 16 16 16 14 24 14 14 14 16 16 16 16	Quad NOR R-S latch tri-state	9 9 9 9 5 5 5 5 5 5 5 5 5 5 5 5 9 9 9 9	.25 .45 .49 .19 .39 .39 .45 .29 !.55 .19 .19 .25 .45 .45 .45 .45	.17 .39 .45 .17 .17 .35 .25 .39 .25 1.35 .17 .15 .17 .22 .39 .39 .39 .29 .39	24942 14912 14947 118578 23211 25216 25232 25259 25275 25355 25021 25064 118586 25099 25101 Sigr 27844 27764 27772 27781 27799	MC1350P MC1408-6 MC1408-8 MC1495L MC1496P MC3479P MC3486P MC3487P MC4044P MC68701 MC14411P MC14490P MC145151F MC145406F MC146818 METICS S N82S123 N82S123 N82S123 N82S126 N82S129 N82S131	8 16 16 14 14 16 16 16 16 16 24 16 22 16 24 Serie 16 16 16 16	Video IF amp (12V operation) 1.29 8-bit D to A converter (DAC0806LCN) 1.49 8-bit D to A converter (DAC0808LCN) 1.49 Linear four quadrant multiplier 8.95 Balanced modulator/demodulator (LM1496N) 89 Biphase stepper motor driver 4.95 Quad EIA-422/423 line rec. with 3-state outputs 69 Prequency phase detector (11C44) 8.95 8-bit EPROM (2048 USA) MPU w/ 128B RAM & I/O 15.95 Bit rate frequency generator 8.95 Hex contact bounce eliminator 5.95 Parallel input PLL freq. synthesizer 5.95 RS232-C/V.28 driver/rec. (CMOS)(75C1406N) 1.95 Real time clock plus RAM 5.95 Seal time clock plus RAM 5.95 Seal time clock plus RAM 5.95 1024-bit PROM (32x8 tri-state) (27S19) 6.95 1024-bit PROM (256x4 open collector) (27S20) 7.95 1024-bit PROM (512x4 tri-state) (AM27S13) 6.95 2048-bit PROM (512x4 tri-state) (AM27S13) 6.95	1.19 1.29 1.29 7.95 .79 4.49 .59 7.95 13.95 7.95 5.39 5.39 1.75 5.39 \$6.25 6.25 6.25 6.25
13004 13012 13039 13055 13071 13098 13119 13127 13151 13186 13215 13231 13258 13274 13354 13400 13426 13434 13442 44257 13469 13485	CD4043 CD4044 CD4046 CD4047 CD4049 * CD4050 * CD4051 * CD4052 * CD4066 * CD4066 * CD4067 CD4069 * CD4071 CD4081 * CD4093 * CD4098 CD4099 CD40106 CD4503 CD4510	16 16 16 16 16 16 16 16 14 24 14 14 14 16 16 16 16 16	Quad NOR R-S latch tri-state 2 Quad 3-state NAND R-S latch tri-state 4 Micropower phase-locked loop 4 Monostable/astable multivibrator 5 Hex/buffer/converter (inverting) 2 Single 8-channel multi./demultiplexer 4 Diff. 4-channel multi./demultiplexer 4 Triple 2-channel multi./demultiplexer 4 14-stage ripple-carry binary 4 Quad bilateral switch 3 16-channel analog multi/demultiplexer 1.7 Hex inverter (74C04) 2 Quad EXCLUSIVE-OR gate (74C86) 2 Quad 2-input OR gate 2 Quad 2-input AND gate 2 Quad 2-input NAND Schmitt trigger 2 8-stage shift-and-store bus register 4 CMOS/MOS dual mono. multivibrator 4 8-bit addressable latch 4 Hex inverter Schmitt trigger (74C14) 3 Tri-state hex buffer (74C367) 80C97 4 BCD up/down counter 6	9 9 9 9 5 5 5 5 5 5 5 5 5 5 5 5 9 9 9 9	.25 .45 .49 .19 .39 .39 .45 .29 .155 .19 .19 .25 .45 .45 .45 .45 .45	.17 .39 .45 .17 .17 .35 .25 .39 .25 1.35 .17 .15 .17 .22 .39 .39 .29 .39	24942 14912 14947 118578 23211 25216 25232 25259 25275 25064 118586 25099 25101 Sigr 27844 277764 27772 27781 27799 27801	MC1350P MC1408-6 MC1408-8 MC1495L MC1496P MC3479P MC3486P MC3487P MC4044P MC68701 MC14411P MC14490P MC145151F MC145406F MC146818 METICS S N82S123 N82S123 N82S123 N82S129 N82S131 N82S137	8 16 16 14 16 16 16 16 16 16 24 26 16 16 16 16 16 16 18	Video IF amp (12V operation) 1.29 8-bit D to A converter (DAC0806LCN) 1.49 8-bit D to A converter (DAC0808LCN) 1.49 Linear four quadrant multiplier 8.95 Balanced modulator/demodulator (LM1496N) 89 Biphase stepper motor driver 4.95 Quad EIA-422/423 line rec. with 3-state outputs 69 Prequency phase detector (11C44) 8.95 8-bit EPROM (2048 USA) MPU w/ 128B RAM & I/O 15.95 Bit rate frequency generator 8.95 Hex contact bounce eliminator 5.95 Parallel input PLL freq. synthesizer 5.95 RS232-C/V.28 driver/rec. (CMOS)(75C1406N) 1.95 Real time clock plus RAM 5.95 Sobit PROM open collector \$6.95 256-bit PROM (32x8 tri-state) (27S19) 6.95 1024-bit PROM (256x4 open collector) (27S20) 7.95 1024-bit PROM (512x4 tri-state) (AM27S21) 6.95 2048-bit PROM (512x4 tri-state) (AM27S13) 6.95 4096-bit PROM (1024x4 tri-state) (AM27S13) 6.95	1.19 1.29 1.29 7.95 .79 4.49 .59 7.95 13.95 7.95 5.39 1.75 5.39 \$6.25 6.25 6.25 6.25 4.49
13004 13012 13039 13055 13071 13098 13119 13127 13151 13258 13274 13354 13400 13426 13434 13442 44257 13469 13485 13493	CD4043 CD4044 CD4046 CD4047 CD4049 * CD4050 * CD4052 * CD4053 * CD4066 CD4066 * CD4067 CD4069 * CD4071 CD4081 * CD4098 CD4098 CD4099 CD40106 CD4503 CD4511 *	16 16 16 16 16 16 16 16 14 24 14 14 14 16 16 16 16 16 16 16 11 14 14 14 16 16 16 16 16 16 16 16 16 16 16 16 16	Quad NOR R-S latch tri-state	9 9 9 9 5 5 5 5 5 5 5 5 5 5 5 9 9 9 9 9	.25 .45 .49 .19 .39 .39 .39 .45 .29 1.55 .19 .19 .25 .45 .45 .45 .45 .59	.17 .39 .45 .17 .17 .35 .25 .39 .25 1.35 .17 .15 .17 .22 .39 .39 .39 .49 .49	24942 14912 14947 118578 23211 25216 25232 25259 25275 25355 25021 25064 118586 25099 25101 27844 27764 27772 27781 27789 27801 27810	MC1350P MC1408-6 MC1408-8 MC1495L MC1496P MC3479P MC3486P MC3487P MC4044P MC68701 MC14411P MC14490P MC145151F MC145406F MC146818 Cetics S N82S23 N82S123 N82S123 N82S123 N82S129 N82S131 N82S137 N82S181	8 16 16 14 14 16 16 16 16 16 24 16 24 16 16 16 16 16 16 16 18 24	Video IF amp (12V operation) 1.29 8-bit D to A converter (DAC0806LCN) 1.49 8-bit D to A converter (DAC0808LCN) 1.49 Linear four quadrant multiplier 8.95 Balanced modulator/demodulator (LM1496N) 89 Biphase stepper motor driver 4.95 Quad EIA-422/423 line rec. with 3-state outputs 69 Prequency phase detector (11C44) 8.95 8-bit EPROM (2048 USA) MPU w/ 128B RAM & I/O 15.95 Bit rate frequency generator 8.95 Hex contact bounce eliminator 5.95 Parallel input PLL freq. synthesizer 5.95 RS232-C/V.28 driver/rec. (CMOS)(75C1406N) 1.95 Real time clock plus RAM 5.95 Seatime clock plus RAM 5.95 Dual-In-Line Package 5.95 Dual-In-Line Package 5.95 1024-bit PROM (32x8 tri-state) (27S19) 6.95 1024-bit PROM (256x4 open collector) (27S20) 7.95 1024-bit PROM (256x4 tri-state) (AM27S21) 6.95 2048-bit PROM (512x4 tri-state) (AM27S13) 6.95 4096-bit PROM (1024x4 tri-state) 4.95 8192-bit bipolar PROM (1024x8 tri-state) 6.95	1.19 1.29 1.29 7.95 .79 4.49 .59 7.95 13.95 7.95 5.39 1.75 5.39 \$6.25 6.25 6.25 6.25 6.25 4.49 5.95
13004 13012 13039 13055 13071 13098 13119 13127 13151 13258 13274 13354 13400 13426 13434 13442 44257 13469 13485 13493 13514	CD4043 CD4044 CD4046 CD4047 CD4049 * CD4050 * CD4051 * CD4052 * CD4066 * CD4066 * CD4067 CD4069 * CD4071 CD4081 * CD4093 * CD4098 CD4099 CD40106 CD4503 CD4510	16 16 16 16 16 16 16 16 14 24 14 14 14 16 16 16 16 16	Quad NOR R-S latch tri-state 2 Quad 3-state NAND R-S latch tri-state 4 Micropower phase-locked loop 4 Monostable/astable multivibrator 5 Hex/buffer/converter (inverting) 2 Single 8-channel multi./demultiplexer 4 Diff. 4-channel multi./demultiplexer 4 Triple 2-channel multi./demultiplexer 4 14-stage ripple-carry binary 4 Quad bilateral switch 3 16-channel analog multi/demultiplexer 1.7 Hex inverter (74C04) 2 Quad EXCLUSIVE-OR gate (74C86) 2 Quad 2-input OR gate 2 Quad 2-input AND gate 2 Quad 2-input NAND Schmitt trigger 2 8-stage shift-and-store bus register 4 CMOS/MOS dual mono. multivibrator 4 8-bit addressable latch 4 Hex inverter Schmitt trigger (74C14) 3 Tri-state hex buffer (74C367) 80C97 4 BCD up/down counter 6	9 9 9 9 5 5 5 5 5 5 5 5 5 5 5 5 9 9 9 9	.25 .45 .49 .19 .39 .39 .45 .29 .155 .19 .19 .25 .45 .45 .45 .45 .45	.17 .39 .45 .17 .17 .35 .25 .39 .25 1.35 .17 .15 .17 .22 .39 .39 .39 .49 .49	24942 14912 14947 118578 23211 25216 25232 25259 25275 25355 25021 25064 118586 25099 25101 27844 27764 27772 27781 27789 27801 27828	MC1350P MC1408-6 MC1408-8 MC1495L MC1496P MC3479P MC3486P MC3487P MC4044P MC68701 MC14411P MC14490P MC145151F MC145406F MC146818 METICS S N82S123 N82S123 N82S123 N82S129 N82S131 N82S137	8 16 16 14 16 16 16 16 16 16 24 26 16 16 16 16 16 16 18	Video IF amp (12V operation) 1.29 8-bit D to A converter (DAC0806LCN) 1.49 8-bit D to A converter (DAC0808LCN) 1.49 Linear four quadrant multiplier 8.95 Balanced modulator/demodulator (LM1496N) 89 Biphase stepper motor driver 4.95 Quad EIA-422/423 line rec. with 3-state outputs 69 Prequency phase detector (11C44) 8.95 8-bit EPROM (2048 USA) MPU w/ 128B RAM & I/O 15.95 Bit rate frequency generator 8.95 Hex contact bounce eliminator 5.95 Parallel input PLL freq. synthesizer 5.95 RS232-C/V.28 driver/rec. (CMOS)(75C1406N) 1.95 Real time clock plus RAM 5.95 Sobit PROM open collector \$6.95 256-bit PROM (32x8 tri-state) (27S19) 6.95 1024-bit PROM (256x4 open collector) (27S20) 7.95 1024-bit PROM (512x4 tri-state) (AM27S21) 6.95 2048-bit PROM (512x4 tri-state) (AM27S13) 6.95 4096-bit PROM (1024x4 tri-state) (AM27S13) 6.95	1.19 1.29 1.29 7.95 .79 4.49 .59 7.95 13.95 7.95 5.39 1.75 5.39 \$6.25 6.25 6.25 6.25 6.25 4.49 5.95 4.49

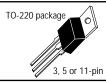




12







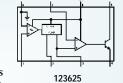
B, 10, 14, 16,

	U 2	or 4-pin	ı	3, 4, 8 or 10-pin			3-pi	n			3, 5 or 11-pin	18, 20 or :	28-pin	
Line	ar Seri	es		Pa	ckage :	(see abo	ve)	Line	ar Seri	es (C	ontinued)	Package	(see abo	ve)
	. Product No.	Pins	Desci	ription	1	10	100		Product No.		·	1	10	100
	LH0002CN	10		ent amplifier\$							Volt. ref. diode (2.5V±1.5%		\$.99	\$.89
	0P07 ★	8		ı-low-offset-voltage op amp		.89	.79		LM385Z		Volt. ref. diode (2.5V±3%).	•	.49	.29
	LM10CN	8	Op ai	mp and voltage reference	5.95	5.39	4.95				Micropower volt. ref. dioc		.69	.59
	LM10CLN	8		voltage (1.1 volt) op amp		3.59			LM386N-1			, ,		.29
25751	MF10CN	20		eral purpose dual active filter		2.75	2.49				Low voltage audio amp. 2		.35	
120723	LM12CLK	TO-3/4	80W	op amp2	9.95	27.95	25.95		LM386N-3		Low voltage audio amp. 5		.59	.49
16301	DS0026CN	8	Dual	mos clk. driver (5MHz)(TC426CPA)	1.39	1.29	1.19		LM393N★	8	Dual comparator		.25	.22
107094	LM34CZ	TO-92	Prec.	. F temp. sensor (-40°F to +230°F)	5.95	5.39	4.95		LF398N	8	Sample and hold circuit		1.29	1.19
155192	LM34DZ	TO-92	Prec.	. F temp. sensor (+32°F to +212°F)	1.75	1.55	1.35	23018	LF411CN	8	Low offset drift JFET inpu		.69	.59
107107	LM35CZ	TO-92	Prec.	. C temp. sensor (-40°C to 110°C)	5.95	5.39	4.95	23026	LF412CN	8	Low offset drift JFET input d	ual op amp 1.19	1.09	.99
155740	LM35DZ	TO-92	Prec.	. C temp. sensor (0°C to +100°C)	1.75	1.55	1.35	33347	TL431CLP	TO-92	Program precision referen	nce	.35	.29
33161	TL062CP	8	Low-	-power JFET op amp. (VCC 8-pin)	69	.59	.49	33355	TL494CN	16	Control. ckt. pulse width i	modulated79	.69	.59
33187	TL071CP	8	Low	noise JFET op amp	39	.35	.29	27422	LM555CN★	8	Timer (MC1455P/NE555V	/) 25	.22	.19
33195	TL072CP★	8	Low	noise JFET dual op amp	39	.35	.29	126797	LMC555CN	8	CMOS 555 timer	49	.45	.39
33216	TL074CN★	14		noise JFET quad op amp		.45	.39	34930	XRL555★	8	Micro power 555 timer		.79	.69
33232	TL081CP	8	JFET	-input op amp	49	.45	.39		LM556N★	14	Dual 555 timer (MC3456F		.39	.35
33241	TL082CP★	8	JFET	-input dual op amp	49	.45	.39		HA17558	8	Quad timer (NE558-8)	•	.35	.29
33267	TL084CN★	14	JFET	-input quad op amp	55	.45	.39		NE558N	16	Quad timer (NE558C)		.35	.29
24811	MAX232CPE	★ 16	Dual	RS232 receiver/transmitter	1.75	1.55	1.35							
23392	LM301N★	8	Impr	oved op amp	39	.35	.29		NE564N	16	High frequency phase lock	•	1.75	1.55
23464	LM308N★	8	Preci	ision op amp	3.95	3.59	3.25		LM565N★	14	Phased locked loop		1.29	1.19
23499	LM309K★	TO-3/2	5V 1	A regulator (0°C to +125°C)	4.95	4.49	3.95		LM567V★	8	Tone decoder		.45	.39
23528	LM311N★	8	Volta	age comparator	29	.25	.22	27490	NE571N	16	Compander, subscriber	2.75	2.49	2.25
23544	LM317K	TO-3/2	1.5A	adj. pos. reg. (1.2V-37V)	1.95	1.75	1.55	143976	LMC660CN	14	CMOS quad operational a	mp 2.09	1.95	1.75
23552	LM317LZ	TO-92	100n	mA adj. pos. reg. (1.2V-37V)	49	.45	.39	120926	LM675T	TO-220/5	Power op amp	6.95	6.25	5.49
23579	LM317T★	TO-220/3	3 1.5A	adj. pos. reg. (1.2V-37V)	45	.39	.35	24467	LM723CN★	14	Voltage regulator (2V-37\	/)39	.35	.29
23608	LM318N★	8	Preci	ision hi-speed op amp	69	.59	.49	24483	LM725CN	8	Instrumentation op amp.	2.75	2.49	2.25
23632	LM319N	14	Hi-sp	peed dual comparator	79	.69	.59	24491	LM733CN	14	Differential amp		.89	.79
23667	LM323K★	TO-3/2		A positive reg		3.59	3.25	24521	LM741CH	TO-5/8	Op amp	2.25	1.95	1.75
23683	LM324N★	14	Low	power quad op amp. (ULN4336)	29	.25	.22	24539	LM741CN★	8	Op amp. (ULN2151)		.22	.19
23721	LM331N	8		is. volt to freq. converter(150ppm/°C)		2.75	2.49	24563	LM747CN★	14	Dual 741 op amp		3.59	3.25
			-	st current source		.69	.59		LM837N	14	Low-noise quad operation		1.75	1.55
	LM335AZ			ision temperature sensor		3.59	2.95		LM1203N	28	RGB video amp system		1.39	1.19
	LM335Z★			mode temperature sensor		.89	.79		LM1458N★	8	Dual op amp. (RC4558)			
23771	LM336Z			age reference (2.5V)		.69	.59						.22	.19
	LM337K			/3 term. adj. neg. reg		2.75	2.49		LM1488N★		Quad line driver RS232 (7		.25	.22
				/adj. neg. reg. (-1.2V-37V)		.69	.59		DS14C88N	14	Quad CMOS line driver (R		.49	.45
23835				dj. pos. reg. (1.2V-32V)		3.59	3.25		LM1489N★		Quad line rec. RS232 (75		.25	.22
		14		d comparator		.25	.22		DS14C89N	14	Quad CMOS line rec. (RS.		.49	.45
	LF347N	14		JFET input op amp. (wide band)		.59	.49		LM1496N	14	Balanced mod./demodulato	r (MC1496P) 89	.79	.69
	LM348N★	14		d 741 op amp. (UPC4741C)		.45	.39	23270	LM1875T	TO-220/5	20-watt power audio amp	2.25	1.95	1.75
23931	LM350K			term. adj. pos. reg. (1.2V-33V)		3.59	3.25	23288	LM1877N-9	14	Dual power audio amp	1.95	1.75	1.25
23940				np. adj. power regulator		1.55	1.35	107140	LM1881N	8	Video synchronous separ	ator2.75	2.49	2.25
		8		T op amp		.45	.39	34260	ULN2001	16	Hi-volt./curr. darl. transis	tor array49	.45	.35
	LF353N★	8		BIFET op amp. (comp. w/ TL082CP)		.35	.29			TO-220/5	8-watt audio high power a	•	1.75	1.55
	LF356N	8		input op amp. (wide band)		.69	.59		ULN2003A		Hi-volt/curr. darl. transist	•	.35	.29
	LM358AN	8		power dual op amp (elect improv.)		.59	.49		ULN2004A	16	Hi-volt/curr. darl. trans. arra	•	.35	.29
		8		power dual op amp		.22	.19		XR2206★	16	Monolithic function gener	•	2.95	
24037	LM380N★	14		tt audio power amp		1.09	.99	34999			FSK demodulator/tone de			
24088				att audio high power amp		5.39	4.95			14			1.59	1.39
24096	LM384N	14	o-wa	att audio amp	1.95	1.75	1.55	120206	LM2574N-5	8	Step-down 5-voltage regu	ııaı01 2.49	2.19	1.95

			• •			1
Line	ear Seri	es (c	ontinued) Package (s	ee page	12)	
* Prepa	ckaged: pleas	e order i	n increments of 10, 100 or 1000			F
Part No.	Product No.	Pins	Description 1	10	100	5
39571	26LS30	16	Dual diff RS422 party line Qd RS423 line driv. \$1.95	\$1.75	\$1.49	5
39589	26LS31	16	Quad diff line driver	.69	.59	5
39600	26LS32	16	Quad diff line receiver	.49	.45	5
34315	ULN2803A	18	Hi-volt. hi-curr. darl. transis. array69	.59	.49	5
23296	LM2901N	14	Quad comp. (LP) MC3302P	.35	.29	5
	№	ational	Fraguency to Voltage Convertor			5

Semiconductor Frequency to Voltage Converter

The LM2907 is a monolithic frequency to voltage converter with a high gain op amp/comparator designed to operate a relay, lamp, or other load when the input frequency reaches or exceeds a selected rate. The tachometer uses a charge pump technique and offers frequency doubling for low ripple, full input protection in the LM2907-8 and its output swings to ground or a zero frequency input.



- Ground referenced tachometer input interfaces directly with variable reluctance magnetic pickups
- · Op amp/comparator has floating transistor output
- 50mA sink or source to operate relays, solenoids, meters, or LEDs
- · Frequency doubling for low ripple
- Tachometer has built-in hysteresis with either differential input or ground referenced input

NC NC			+	
14 13 12	11	10	9	8
CHARLE PARM	4	5 1	> 	7 ic

23317

Part No.	Product No.	Pins	Description 1	10	100
123625	LM2907N-8	8	Frequency to volt converter\$2.49	\$2.25	\$1.95
23317	LM2907N	14	Frequency to volt converter1.75	1.55	1.25
23350	LM2917N-8	8	Frequency to volt converter (CS2917)2.95	2.75	2.49
23341	LM2917N-1	14 14	Frequency to volt converter (CS2917)2.75	2.49	2.25
107166	LM2936Z-5	TO-92	Ultra-low quiescent current 5V reg1.75	1.55	1.25
107182	LM2940CT-5	5 TO-220/3	5V low dropout reg. (max. $45V_{\mbox{in}}$)1.29	1.19	1.09
23376	LM2941T	TO-220/5	1A low dropout adjustable regulator1.75	1.55	1.35
121064	LM2941CT	TO-220/5	1A low dropout adjustable regulator1.49	1.39	1.29
107238	LM3302N	14	Low pwr. low offset volt quad cmpr49	.45	.39
31974	SG3524	16	Regulating pulse width modulator79	.69	.59
126834	LM3876T	TO-220/11	40W high perf. audio amp. with mute4.49	3.95	3.59
24168	LM3900N★	14	Quad amp. (CA3401)	.69	.59
24230	LM3914N★	18	Bar-graph display driver (100138)1.95	1.75	1.55
24256	LM3915N	18	3 DB steps bar-graph disp. driver1.75	1.55	1.35
24272	LM3916N	18	VU meter display driver2.25	1.95	1.75
29356	RC4136N	14	Quad op amp (XR4136)	.79	.69
29372	RC4151NB	8	Volt to freq. converter (XR4151)1.29	1.19	1.09
27385	NE5532★	8	Dual low-noise op-amp	.49	.39
27406	NE5534★	8	Low noise op-amp	.69	.59
51182	78L05★	TO-92	5V pos. voltage regulator (100mA)	.17	.15
51203	78L12	TO-92	12V pos. voltage regulator (100mA)*	.17	.15
51246	7805K★	TO-3/2	5V 1A pos. voltage reg. (LM340K-5) 1.49	1.39	1.29
51318	7812K ★	TO-3/2	12V 1A pos. voltage reg. (LM340K-12) 1.49	1.39	1.29

UNITRODE 7815K 15V 1A Positive Voltage Regulator

The 78XX series of three terminal voltage regulators is available with 5V, 12V and 15V fixed output voltages making them useful in a wide range of applications.

- Output current in excess of 1.0A
 Internal thermal overload protection
 No external components required
- Output transistor safe area protection
 Voltage range: 15V
- · Internal short circuit current limit

Part No.	Product No.	Pins	Description	1	10	100
51369	7815K	TO-3/2	15V 1A pos. voltage reg. (LM340K-15)\$.79	5	\$.49	\$.25

Line	ear Seri	ies (c	ontinued) Package	(see page	12)
Part No.	Product No.	Pins	Description	10	100
51262	7805T★	TO-220/3	5V 1A pos. voltage reg. (LM340T-5) \$.29	\$.25	\$.22
51297	7806T★	TO-220/3	6V 1A pos. voltage reg. (LM340T-6)29	.25	.22
51300	7808T★	TO-220/3	8V 1A pos. voltage regulator29	.25	.22
51334	7812T★	TO-220/3	12V 1A pos. voltage regulator29	.25	.22
51377	7815T★	TO-220/3	15V 1A pos. voltage regulator29	.25	.22
51414	7824T	TO-220/3	24V 1A pos. voltage regulator29	.25	.22
51238	78S40	16	1.5 amp switching reg. (1.25V-40V)1.95	1.75	1.25
51422	79L05	TO-92	5V neg. voltage regulator (100mA)25	.22	.19
51431	79L12	TO-92	12V neg. voltage regulator (100mA)25	.22	.19
51457	7905T★	TO-220/3	5V 1A neg. voltage regulator35	.29	.25
51481	7912T★	TO-220/3	12V 1A neg. voltage regulator	.29	.25
51502	7915T ★	TO-220/3	15V 1A neg. voltage regulator35	.29	.25

Precision Waveform Generator/Voltage Controlled Oscillator

The ICL8038 waveform generator is a monolithic integrated circuit capable of producing high accuracy sine, square, triangular, sawtooth and pulse waveforms with a minimum of external components. It is fabricated with advanced monolithic technology, using Schottky barrier diodes and thin film resistors, and the output is stable over a wide range of temperature and supply variations.

- Low frequency drift with temperature: 250ppm/°C
- · Low distortion: 1% (sine wave output)
- · High linearity: 0.1% (triangle wave output)
- Wide frequency range: 0.001Hz to 300kHz
- · Variable duty cycle: 2% to 98%
- High level outputs: TTL to 28V
- · Simultaneous sine, square, and triangle wave outputs

Part No.	Product No.	Pins	Description 1	10	100
51879	8038CCPD	14	Precision wave form generator\$3.49	\$3.19	\$2.75
50876	75150	8	Dual line driver*	.49	.45
50884	75154	16	Quad line receiver (9617)	.69	.59
50930	75173	16	Quadruple differ. line receiver1.69	1.49	1.09
50948	75174	16	Quad diff. RS422 line dvr. with 3-state out 1.09	.99	.89
50956	75175	16	Quad diff. EIA 422A/423A line rec.w/3-st. out 1.09	.99	.89
50964	75176 ★	8	Differential bus transceiver	.69	.59
23157	75188	14	Quad line driver RS232 (LM1488N)29	.25	.22
23181	75189	14	Quad line rec. RS232 (LM1489N)29	.25	.22
51027	75451	8	Dual peripheral AND driver	.29	.22
51035	75452	8	Dual peripheral NAND driver	.39	.35
51131	75492	14	Hex digit driver (492)6.95	6.25	5.95
Part No.	Description	S	ee page 22 for details	1	10
84988	480 pc. Lir	near IC	cabinet kit\$169	.95 \$ ⁻	152.95
130411	Refill packa	age fo	r 84988 (480 pcs.)154		139.95

)	Line	ear Seri	es	SOIC Package	liter	Truviu
5	Part No.	Product No.	Pins	Description 1	10	100
5	86721	LM324D	14	Low power quad op amp (WP 90)\$.29	\$.25	\$.22
,	86799	LM555CM	8	Timer (NE555D)39	.35	.25
,	May	cim Line	ar S	eries Dual In Lina Backaga	1	THE P

Max	im Linea	ar S	eries Dual-In-Line Package		1111
Part No.	Product No.	Pins	Description	1	10
142535	MAX202CPE	16	+5V RS232 transceiver requires 0.1µf caps\$2.	.49	\$2.25
24811	MAX232CPE★	16	+5V powered, dual RS232		
			transmitter/receiver (0°C to +70°C)1.	.75	1.55
106147	MAX232CWE	16	+5V powered, dual RS232		
		(SOIC)	transmitter/receiver1.	.95	1.75
106155	MAX232EPE	16	+5V powered, dual RS232		
			transmitter/receiver (-40°C to +85°C)2.	.49	2.25
106163	MAX233CPP	20	+5V powered, multichannel RS232		
			drivers/receivers (no ext. components)4.	.95	4.49





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Max	kim Line	ar S	eries (Continued) Dual-In-Line Package	i i i i i i i i i i i i i i i i i i i	680	0 Series	Mi	Croprocessors Dual-In-Line Package 🧗	777777
Part No.	Product No.	Pins	Description	1 10	Part No.	Product No.	Pins	Description 1	10
106171	MAX235CPG	24	+5V powered, five RS232 transmitter/		43481	6800	40	8-bit MCU\$6.95	\$6.25
10/100	MANAGORNO	24	receiver (no ext. components)\$9.9!	5 \$8.95	43502	6802	40	8-bit MPU with clock and RAM (1MHz)6.95	6.25
106180	MAX238CNG	24	+5V powered, quad RS232 transmitter and receiver4.7!	5 4 25	43529	6803	40	8-bit MCU with 128K RAM6.95	6.25
106219	MAX690CPA	8	Microprocessor watchdog/battery	, I.EU	43537	6808	40	8-bit MPU with clock6.95	6.25
			switchover/reset generator3.99	3.59	43545	6809E	40	MPU with external clock (1MHz)3.95	3.59
106227	MAX691CPE	16	Microprocessor watchdog/battery		43561	6810	24	128x8 static RAM (1MHz)	.79
10/0/0	. MAN/40000DA	0	switchover/reset generator5.4			6821★	40	Peripheral interface adapter (1MHz)2.95	2.75
	MAX1232CPA		Microprocessor monitor2.4		73717	68B21	40	Peripheral interface adapter (2MHz)3.25	2.95
Atm	iel AT89 0	C Se	eries Dual-In-Line Package		43617	6840	28	Programmable timer (1MHz)2.95	2.75
Part No.	Product No.	Pins	Description 1 1	100	43633	6850	24	Asynch. comm. int. adapter (ACIA)1.95	1.75
	AT89C1051-24F		8-bit MCU, 24MHz 1Kb flash memory\$3.75 \$3.44		25304	MC68000L8	64	MPU 16-bit (8MHz)	7.95
168874	AT89C2051-24F	PC 20	8-bit MCU, 24MHz 2Kb flash memory3.75 3.4		25291	MC68000L10	64	MPU 16-bit (10MHz)	12.95
168891	AT89C51-20P	C 40	8-bit MCU, 20MHz 4Kb flash memory3.75 3.4	3.19	25347	MC68661PB	28	Enhanced prog. comm. interf. (2661-1/2) 4.9152MHz 4.95	3.95
168903	AT89C51-24P	C 40	8-bit MCU, 24MHz 4Kb flash memory3.95 3.56	3.25		MC68661PC	28	Enhanced prog. comm. interf. (2661-3) 5.0688MHz	.75
173930	AT89C52-20P	C 40	8-bit MCU, 20MHz 8Kb flash memory4.95 4.49	3.95		MC68701	40	8-bit EPROM (2048 USA) MPU w/ 128B RM & I/O15.95	13.95
168920	AT89C52-24P	C 40	8-bit MCU, 24MHz 8Kb flash memory5.95 5.39	9 4.95		MC68705P3S	28	8-bit EPROM (1804 Usa) MPU w/ 112B RAM & I/O17.95	
168938	AT89C52-24J0	C 44	8-bit MCU, 24MHz 8Kb flash memory PLCC4.95 4.4	3.95		MC68705U3S	40	8-bit EPROM (3776 Usa) MPU w/ 112B RAM & I/O24.95	22.95
168946	AT89C55-24P	C 40	8-bit MCU, 24MHz 20Kb flash memory6.95 6.29	5.75		MC68HC11A1P	48	8-bit micro controller with A/D converter15.95	13.95
RCA	Linear	Seri	es Dual-In-Line Package	22 2 5 5 5 5 7		MC68HC705C8P	40	8-bit HCMOS MCU, 8K OTPROM, 24 I/O lines	8.95
			·	[[[]]]]		MC68HC705C8S	40	8-bit, HCMOS MCU, 8K bytes, EPROM34.95	31.95
	Product No.			1 10	108927	MC68HC705K1P	16	8-bit HCMOS MCU, 504 bytes, OTPROM, 10 I/O, timer4.95	4.49
12079	CA3046N	14	NPN transistor array (ULN2046)\$.4		800	0 Series	Mi	Croprocessors Dual-In-Line Package	7777
12116	CA3080E	8	Op transconductance amp. (100135)					•	**
12124	CA3081N	16	Com. emitter NPN array (ULN2081)			8031★	40	CPU with 128x8 RAM and I/O\$2.95	\$2.75
12159	CA3086N	14	Transistor array NPN (ULN2086)			80C31	40	CPU with 128x8 RAM and I/O (CMOS)2.95	2.75
12183 12204	CA3130E CA3140E	8 8	CMOS op amp		102197		40	8-bit MCU 256x8 RAM3.95	3.59
12239	CA3140E CA3161E	16	BCD to 7-seq. decoder driver		108804	80C32-1	40	8-bit MCU 256x8 RAM (CMOS)3.95	3.59
12247	CA3161E	16	Dual slope & rate analog/dig. convert		51861	8035	40	MPU 8-bit	3.59
24168	CA3401N	14	Quad amp (LM3900N) (221-235)		51959	8039	40	CPU single chip 8-bit (128 bytes RAM)3.95	3.59
			, , , , , ,		51692	80C39	40	CPU single chip 8-bit (128 bytes RAM) CMOS4.49	3.95
Z80	Series i	VIICI	OPTOCESSORS Dual-In-Line Package	mm	51975	8048*	40	MPU 8-bit (can use for 8035) 99	.89
Part No.	Product No.	Pins	MHz Description	1 10	51983	8049*	40	CPU single chip 8-bit (can use for 8039) 1.95	1.75
35561	Z80	40	2.5 CPU (MK3880N/780C)\$1.3	9 \$1.19	51991	8051AP**	40	MCU with 128x8 RAM4.95	4.49
35570	Z80-CTC	28	2.5 Counter timer circuit (MK3882)99	.89	52003	8052AH**	40	CPU 8-bit 256 bytes RAM, timer/counter and I/O $$ 6.95	6.25
35588	Z80-PIO	40	2.5 Parallel I/O interface controller	.75	125647	80C52BASIC	40	CPU 8-bit CMOS with basic interpreter19.95	17.95
35596	Z80A★	40	4 CPU (MK3880N-4/780C-1) 1.7 !	1.55	126252	BK52	_	Basic-52 Programming Book (see pg 103)22.95	19.95
35609	Z80A-CTC	28	4 Counter timer circuit (MK3882-4)1.75	1.55	52046	8080A	40	CPU 8-bit N-channel (1MHz)3.95	3.59
35625	Z80A-DART	40	4 Dual asynchronous rec./transmitter2.99	2.75	52062	8085A★	40	CPU 8-bit N-channel (3MHz)4.49	3.95
35641	Z80A-PIO	40	4 Parallel I/O interf. contr. (MK3881-4) 1.4		52071	8085A-2	40	CPU 8-bit N-channel (5MHz)4.95	4.49
35668	Z80A-SIO/0	40	4 Serial I/O (TxCB & RxCB bond.) MK3884-42.1		51705	80C85	40	CPU 8-bit N-channel (3MHz)(CMOS)5.95	5.39
35684	Z80A-SIO/2	40	4 Serial I/O (lacks SYNCB) MK3887-41.7!		52100	8086-2	40	CPU 16-bit (8MHz)	1.75
35705	Z80B	40	6 CPU (MK3880N-6)		52142	8088	40	CPU 16-bit (8-bit data bus) 5MHz2.95	2.75
		40	4 CPU (Z84C0004PEC) CMOS		52169	8088-2	40	CPU 16-bit (8-bit data bus) 8MHz5.95	5.39
35799	Z8530	40	2 Serial communications controller			8155★	40	HMOS RAM I/O port/timer (3MHz)4.95	3.95
185332		40	2 ROMIess MCU1.2!			8155-2	40	HMOS RAM I/O port/timer (5MHz)5.95	5.39
500	0 Series	and	d Clock Chips Dual-In-Line Package		52193		40	256x8 RAM I/O port/tmr (CMOS) 3MHz3.95	3.25
Part No.	Product No.	Pins	Description 1	10	52329		40	RAM with I/O port and timer9.95	8.95
32803	TCM5089N	16	Integrated tone dialer chip\$4.95		l		24	8-bit input/output (74S412)	5.39
	MM5321N	16	TV camera synchronous generator	5.39		8216	16	Bi-directional bus driver (non-invert.)3.95	3.59
26083	MM5314N	24	6-digit LED/incandes. readout clock chip19.95	17.95			16	Clock generator/driver	2.49
26171	MM5450N	40	34-segment LED display driver	4.49		8228	28	System contr./bus driver (74S428)	.39
	MM58167AN	24	Microprocessor real time clock	4.49		8243	24	I/O expander for 48 series	4.25
29591	RTC58321B	16	Real time clock module (see page 18)	6.95				available for use) Tie pin 7 high to bypass the internal ROM	7.23
95530	RTC72421B	18	Real time clock module (see page 18)	5.95				r 8049 to 8039) ** Tie pin 7 nign to bypass the internal ROW	M
		. 3		5.75	1 ("				



8000) Series I	Vlicro	DPTOCESSORS (Continued) Dual-In-Line Package		800	n Series	Micro	Oprocessors (Continued)	Dual-In-Line	55
	Product No.	Pins	Description Package	I 10		. Product No.		Description	Package /	10
52610		40	Asynchronous comm. element\$4.95			Pentium® 100		100MHz Pentium® MPU		
52628	8250B	40	ACE (IBM PC/XT software compat.)		130825	Pentium® 120	296/PGA	A 120MHz Pentium® MPU	34.95	29.95
52644	8251	28	Prog. comm. I/O (USART)2.95		130833	Pentium® 133	296/PGA	A 133MHz Pentium® MPU	34.95	29.95
52652	8251A★	28	Prog. comm. interface (USART)3.49	3.25	130841	Pentium® 166	296/PGA	A 166MHz Pentium® MPU	49.95	44.95
52370	82C51A	28	Prog. comm. interface (USART) CMOS3.95			Pent. MMX® 200		A 200MHz Pentium MMX® MPU		
52679	8253	24	Prog. interval timer	3.59			376/PGA	A 233MHz Pentium MMX® MPU		
52687	8253-5	24	Prog. interval timer (2MHz)4.49	3.95		Pentium® II 300	_	300MHz Pentium® II MPU		
52388	82C53-5	24	Prog. interval timer (CMOS) 2MHz4.95	4.49		Pentium® II 400 Pentium® III 600	—) —	400MHz Pentium® II MPU 600MHz Pentium® III MPU		
180427	82C53-5SSOP	32	Prog. interval timer (CMOS) 2MHz (PLCC)3.95	3.59		Pentium® III 700		700MHz Pentium® III MPU		
52708	8254	24	Prog. interval timer (UPD71054)3.95	3.59		Pentium® III 733		733MHz Pentium® III MPU		
52716	8254-2	24	Prog. interval timer (10MHz)5.95	5.39		Pentium® III 800		800MHz Pentium® III MPU		
52396	82C54	24	Prog. interval timer (CMOS) 3.95	3.59	180793	Pent. PRO® 166	376/PGA	A 166MHz Pentium PRO® MPU	129.95	119.95
52409	82C54-2	24	Prog. interval timer (CMOS) 10MHz3.95	3.59	900	0 Series	Mic	ronrocassors pulluling	Davidson A	
52724	8255★	40	Prog. periph. I/O (PPI) 71055 (2MHz)3.95	3.59		. Product No.	Pins	TOPTOCESSORS Dual-In-Line Description	Package 1	10
52732	8255A-5 ★	40	Prog. periph. I/O (PPI) 5MHz4.95	4.49	53663		16	FND 70 driver/latch		
52417	82C55A	40	Prog. periph. I/O (PPI) CMOS3.95	3.59		AM9513APC	40	System timing controller		
52425	82C55A-5	40	Prog. periph. I/O (PPI) CMOS (5MHz)3.95	3.59	V20	Chine		, ,	6	
52759	8256	40	Multif. universal asynch. rec./trans21.95	19.95		Chips		Dual-In-Lin e	,,,	Milli
52775	8259	28	Prog. interrupt controller (UPD71059)1.49	1.25		UPD70108-5	40	(5MHz) V20 chip (replaces the 8088)		
52783	8259-5	28	Prog. interrupt controller (8259A-2)1.95	1.75	34358	UPD70108-8	40	(8MHz) V20 chip (replaces the 8088-	-2) 9.95 -	8.95
52821	8275	40	Prog. CRT controller12.95	10.95	A/D	and D/A	Conv	erters and Controllers	Dual-In-Line Package	
52839	8279	40	Prog. keyboard/display interface10.95	9.95	10145	ADC0803LCN	20	8-bit A/D converter (±1/2 LSB)	\$6.95	\$5.95
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52855	8282	20	Octal latch (UPD71082)5.95	5.39	10170	ADC0808CCN	l 28	8-bit A/D converter with 8-ch. analog	5.95	5.39
52863	8283	20	Octal latch inverts input data at outputs2.95	2.25	10188	ADC0809CCN		8-bit A/D converter (8-ch. MPX)	2.95	2.75
52871	8284A	18	Clock gen. and driver (UPD71084)3.95	3.59		ADCO817CCN		8-bit A/D converter (16-ch. MPX)		
52898	8286	20	Octal bus transceiver (UPD71086)3.95			ADC0820CCN ADC0831CCN		8-bit hi-spd. A/D conv. with track/hold .		4.49 1.75
52901	8287	20	Octal bus transceiver (inverted)9.95			DACO800LCN		8-bit A/D converter w/ single differentia 8-bit D/A converter (±1 LSB)	•	1.75
52919	8288	20	Bus controller (UPD71088) 82C88-22.95			DAC0806LCN		8-bit D/A convtr. (±1 LSB) MC1408P6		
52951	8564	48	VIC (video interface chip for C128)		14947	DAC0808LCN	★ 16	8-bit D/A converter (MC1408P8)	1.49	1.29
53006	8741	40	8-bit univ. peripheral interface (EPROM)6.95		14963	DAC0830LCN	20	8-bit μP D/A converter (.05% Lin.)		5.39
53014	8742	40	8-bit univ. peripheral interface9.95			DAC0832LCN		8-bit μP D/A conv. dbl. buff. (20% Lir	•	3.59
53022		40	CPU 8-bit, EPROM, RAM and I/O (21V)12.95		14980	DAC1222LCN	18	12-bit D/A converter (.20% Lin.)	9.95	8.95
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	8749H	40	MPU 8-bit (EPROM version 8049)		51941	80387-33	68PGA	33MHz math coprocessors	\$27.95	\$24.95
53073		40	CPU w/ 4Kx8 EPROM & 128x8 RAM (3.5-8MHz)18.95		76531	80387-25SX	68PLCC	25MHz math coprocessors	27.95	24.95
	8751H	40	CPU w/ 4Kx8 EPROM & 128x8 RAM (1.2-12MHz) 24.95		EPR	ROMs		Dual-In-Line	Package	777777
	87C51	40	CPU w/ 4Kx8 EPROM & 128x8 RAM(3.5-12MHz)CMOS 19.95				24			¢4.40
53090		40	7.95		39909	2708 TMS2532A	24	1K x 8 8K 450ns (+5V, -5V, +12 4K x 8 32K 450ns (21V)		
			A 33MHz 486 speed doubler CPU (Intel) 19.9 5			TMS2716	24 24	4K x 8 32K 450ns (21V) 2K x 8 16K 450ns (+5V, -5V, +12		4.49 1.49
			A 30MHz 460 speed dodbief CFO (filter) 19.9 5 A 100MHz Am486DX4 CPU (AMD) (pulls) 24.9 5			2716*	24	2K x 8 16K 450ns (25V)		
131000				21.73		2716-1	24	2K x 8 16K 350ns (25V)		
1/000		•	ated Retention Module		39706		24	2K x 8 16K 450ns (25V) CMOS		
	7: Pentium® II patible with Pe		\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \		114876		24	4K x 8 32K 450ns (12.5V)		
(P/N	151651, pg 15	5)	168007	168997		2732★	24	4K x 8 32K 450ns (25V)		
	9: Pentium® II 1/ plastic faster		ink Support	- H		2732A-20★	24	4K x 8 32K 200ns (21V)		
	patible with Pe			No.	40125	2732A-25	24	4K x 8 32K 250ns (21V)		
	151298, pg 10	02)		169009	40133	2732A-45	24	4K x 8 32K 450ns (21V)	3.95	3.59
Part No 16899		retentio	on module\$2.95	10 \$2.49	39765	27C32	24	4K x 8 32K 450ns (25V) CMOS	4.95	4.49
169009			nk support2.95	2.49		† One Time	Programr	mable See EPROM programmers on page	147 & 148	

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Part No	. Product No.	Pins	Descriptio	n 1	10	Part No. Product No. Pins Description 1	10
40192	2764-20★	28	8K x 8	64K 200ns (21V)\$5.95	\$5.39	127933 27C4096-12 40 256K x 16 4096K 120ns (12.5V) CMOS\$6.95 \$6	6.25
40205	2764-25★	28	8K x 8	64K 250ns (21V) 4.95	4.49	111780 27C040-10 32 512K x 8 4096K 100ns (12.5V) CMOS8.95	7.95
40230	2764A-20★	28	8K x 8	64K 200ns (12.5V) 3.95		102293 27C040-12 32 512K x 8 4096K 120ns (12.5V) CMOS8.49	7.49
40133		24	4K x 8	32K 450ns (21V) 3.95			6.95
	27C32	24	4K x 8	32K 450ns (25V) CMOS 4.95			5.95
	2764-20*	28	8K x 8	64K 200ns (21V)		, ,	4.95
	2764-25*	28	8K x 8	64K 250ns (21V)4.95		` '	1.95
	2764A-20★	28	8K x 8	64K 200ns (12.5V)		I EPRUIVI ACCESSOFIES	
	2764A-25★	28	8K x 8	64K 250ns (12.5V)		D. IN. D. L. IN. D. L. IV.	10
	27C64-12	28	8K x 8 8K x 8	64K 120ns (12.5V) CMOS5.95		4/000 FM04 4.4 FM FDDOM window (F/ labels) #4.0F #4	
	27C64-15★ 27C64-20	28 28	8K x 8	64K 150ns (12.5V) CMOS4.95 64K 200ns (12.5V) CMOS4.25		130/4 CE2 Conductive form (12" v 24" v 25") bond block 7.05 /	6.95
	27C64-25	28	8K x 8	64K 250ns (12.5V) CMOS3.95		// (042 DE1	
	271280TP†	28	16K x 8	128K 250ns (21V)		15713 DE4	
	27128-25 ★	28	16K x 8	128K 250ns (21V)			
	27128A-15	28	16K x 8	128K 150ns (12.5V) 4.49		LLI IXOIVIS Dual-III-Line Package ' YEEF	mm
39968		28	16K x 8	128K 200ns (12.5V) 4.25		Part No. Product No. Pins Description 1	10
39984	27128A-25★		16K x 8	128K 250ns (12.5V) 3.95		108839 24C02P	\$.69
	27C128-12	28	16K x 8	128K 120ns (12.5V) CMOS3.95		108847 24C04P	1.09
	27C128-15★	28	16K x 8	128K 150ns (12.5V) CMOS3.75		74691 28C16A-25 24 2K x 8 16K 250ns (5V) CMOS3.95	3.59
	27C128-20	28	16K x 8	128K 200ns (12.5V) CMOS3.49	3.25	40416 2817A-25	6.25
	27C128-25	28	16K x 8	128K 250ns (12.5V) CMOS3.25		40459	6.25
	27256-15*	28	32K x 8	256K 150ns (12.5V) 5.49	4.95	1/482/ 28C64A-25	3.59
	27256-20*	28	32K x 8	256K 200ns (12.5V)4.49	3.95	40475	4.49
40061	27256-25	28	32K x 8	256K 250ns (12.5V) 3.49	3.19		8.95
140476	27C256-70	28	32K x 8	256K 70ns (12.5V) CMOS5.95	5.39		7.95
112740	27C256-10	28	32K x 8	256K 100ns (12.5V) CMOS5.75	5.25		.59
65904	27C256-12	28	32K x 8	256K 120ns (12.5V) CMOS5.25	4.75		_
39714	27C256-15★	28	32K x 8	256K 150ns (12.5V) CMOS4.95	4.49	PROMS Dual-In-Line Package	iiii
39722	27C256-20★	28	32K x 8	256K 200ns (12.5V) CMOS4.49	3.95	27844 N82S23 16 32 x 8 256-bit PROM (OC) (27S18)\$6.95 \$6	6.25
39731	27C256-25★	28	32K x 8	256K 250ns (12.5V) CMOS4.25	3.75	27764 N82S123 16 32 x 8 256-bit PROM tri-state (27S19) 6.95	6.25
40150	27512-20	28	64K x 8	512K 200ns (12.5V) 2.95	2.75	27772 N82S126 16 256 x 4 1024-bit PROM (OC) (27S20) 7.95	6.95
	27512-25*	28	64K x 8	512K 250ns (12.5V) 2.75		21/61 No23129 10 250 X 4 1024-DIL PROWEIT-State (2/321) 0.95	6.25
175206	27C512-90	28	64K x 8	512K 90ns (12.5V) CMOS 7.95	6.95	27799 N82S131 16 512 x 4 2048-bit PROM tri-state (27S13) 6.95	6.25
131959	27C512-10	28	64K x 8	512K 100ns (12.5V) CMOS5.95		27801 N82S137 18 1024 x 4 4096-bit PROM tri-state (27S33) 4.95	4.49
	27C512-12★		64K x 8	512K 120ns (12.5V) CMOS5.75		27810 N82S181 24 1024 x 8 8192-bit bipolar PROM tri-state 6.95	5.95
	27C512-15★		64K x 8	512K 150ns (12.5V) CMOS5.49		27836 N82S191 24 2048 x 8 16,384-bit PROM tri-state6.95	6.25
	27C512-20	28	64K x 8	512K 200ns (12.5V) CMOS 4.95		48531 74S188 16 32 x 8 Open collector (27S18)	5.39
	27C512-25*	28	64K x 8	512K 250ns (12.5V) CMOS4.75		48696 74\$287	6.25
	27C1024-15	40		1024K 150ns (12.5V) CMOS4. 75		/ /49717 7/5099 16 30 v 9 Tri state (27510/TRD195030M) // 05	4.49
	27C010-45	32		1024K 45ns (12.5V) CMOS 6.95		4000E 749207 16 256 v.4 Open collector (TDD249A10N)	5.39
	27C010-70	32		1024K 70ns (12.5V) CMOS 6.95		40044 745472 20 E12 v 0 Tri state high speed (MD7124) 0 0E 1	5.95
	27C010-80	32		1024K 80ns (12.5V) CMOS 5.75		40040 740574 4/ 510 v. 4 Tri -t-t- (07012)	6.25
	27C010-10	32		1024K 100ns (12.5V) CMOS 5.49		40000 740570 40 4004 4 T' 14 (07000)	2.75
	27C010-12	32		1024K 120ns (12.5V) CMOS 5.25		10 D D I. (1007)	1.000
	27C010-15★ 27C010-20	32		1024K 150ns (12.5V) CMOS 4.95		IC FIUJECIS DOUK (1771)	:15
	27C010-20 27C020-10	32 32		1024K 200ns (12.5V) CMOS 4.75 2048K 100ns (12.5V) CMOS 6.95		Trompe I abilishing to projects was written for nobbyists	.0
	27C020-10 27C020-12	32		2048K 120ns (12.5V) CMOS 6.59 2048K 120ns (12.5V) CMOS 6.59		singuite anginete that you will be able to be add and	88
	27C020-12 27C020-15*	32		2048K 150ns (12.5V) CMOS 6.35		quickly and test easily. (212 pages)	
65681		32		2048K 200ns (12.5V) CMOS 5.95		• Size. 6.0 X 9.0 • Weight. 6.7 lbs.	10
03001	Z100ZU=ZU			2046K 2001IS (12.5V) CIVIOS 5.95 ammers on page 147 &148!	5.37	Part No. Description 1 143271 IC Projects Book (1997) \$24.95 \$22	10 2.49
		500	progr				



				We carry major manufactur	ers – ca	ll for pri	cing on quar	ititie	s over 100.		
	s and GA	Ls		Dual-In-Line Package			tic RAMs				
	. Product No.	Pins	Description				Product No.	Pins			10
	PAL16L8	20		put AND-OR-INVERT gate array\$2.49			62256LP-70	28	32K x 8	70ns low power CMOS\$4.95	\$4.49
28038	PAL16R8	20		put reg. AND-OR gate array			62256LP-10★		32K x 8	100ns low power CMOS3.95	3.59
88399	16V8-10*	20		ces PALs listed below) .3"W2.25			62256LP-12	28	32K x 8	120ns low power CMOS3.75	3.49
	16V8-15*	20		ces PALs listed below) .3"W1.19			6285128LP-50		128K x 8	50ns low power CMOS	12.95
	16V8-25*	20	, ,	ces PALs listed below) .3"W1.09			628128LP-70		128K x 8	70ns low power CMOS12.95	11.95
	20V8-10**	S-24		ces PALs listed below) .3"W2.95			628128LP-85 628512LP-70		128K x 8	85ns low power CMOS 11.95 70ns low power CMOS 19.95	10.95
38658	20V8-15** 20V8-25**	S-24	` '	ces PALs listed below) .3"W2.2!				32	512K x 8	•	10.93
	20V6-25 22V10-10	S-24 S-24		ces PALs listed below) .3"W1.75 ces PALs listed below) .3"W4.95			t SRAMs			Dual-In-Line Package	
	22V10-10 22V10-15	S-24		ces PALs listed below) .3"W4.49				Pins	Description		Price
	22V10-15 22V10-25	S-24	, ,	ces PALs listed below) .3"W3.49			ATT7C199P-12	28	32K x 8	12ns high speed CMOS (.3"W)	
				nat can be used in place of numerous			ATT7C199P-15		32K x 8	15ns high speed CMOS (.3"W)	2.75
	,			12H6, 12L6, 12P6, 14H4, 14L4, 14P4		Flas	sh Memo	ry		Dual-In-Line Package	
				4, 16R6, 16R8, 16RP4, 16RP6,16RF		185210	28F256-25	32	32K x 8	250ns (12V) CMOS	\$4.95
				16H6, 16L6, 16P6, 18H4, 18L4, 18P4		74771	28F010-15	32	128K x 8	150ns (12V) CMOS	6.95
				4, 20R6, 20R8, 20RP4, 20RP6, 20R		74835	28F020-15	32	256K x 8	150ns (12V) CMOS	6.95
PEE	L Device	es (C	CIVIUS)	Dual-In-Line Package		Dyn	amic and	d V	ideo RA	Ms	THE REAL PROPERTY.
_			•	e Logic (PEEL) devices allow for							# 00
_	-			andard 20-pin and 24-pin PLDs (additional architectural features s			4116-15	16	16K x 1	150ns (MM5290J-1R)	
	an be put int			danional arcinicetaral reactives i	o more		4164-150	16	64K x 1	150ns (MCM6665-15)	
Part No	. Product No.	Pins	Description		l 10		41256-100	16	256K x 1	100ns (HY53C256LS-10)	
105953	18CV8P-25	20	PLD supers	et 12 config. I/O pins (8) 25ns\$2.2	\$1.95		41256-120	16	256K x 1	120ns (MB81256-12)	
105996	22CV10AP-25	24	PLD superse	et 4/12 config. I/O pins (10) 25ns3.95	3.59		41256-150	16	256K x 1	150ns (P21256-15)	
Sta	tic RAMs			Dual-In-Line Package			41464-10 41464-12	18 18	64K x 4 64K x 4	100ns (HY53C464S-10) 120ns (MB81464-12)	
			2K v 0		¢1.7E		41464-12	18	64K x 4	150ns	
	2016-12	24	2K x 8	120ns (AM9128-12)\$1.95			511000P-10	18	1M x 1	100ns (M5M4C1000-10)	
38746	2016-20	24	2K x 8	200ns (MB8128-20)			514256P-60	20	256K x 4	60ns (HY514256P-60)	
38931	2111-1 2114N	18 18	256 x 4	500ns (AM9111APC)1.39			514256P-70	20	256K x 4	70ns (TC514256P-70)	
38973		18	1K x 4 1K x 4	450ns (9114BPC)			514256P-80	20	256K x 4	80ns (UPD424256-80)	
	2114N-2L	18	1K x 4	200ns low power2.49			HM514260	SOJ	256K x 16	70ns	
	2114N-2L 2148HN-3	18	1K x 4	55ns (4K) static RAM1.69		Mar	maru Ma	اررام	00		
25911	MK48Z02B-15	24	2K x 8	150ns (16K) zero-power RAM8.99		ivier	mory Mo	aui	es		
42198	5101★	22	256 x 4	450ns (CMOS)6.99		130729	JEED07208	72	2M x 32	60ns SIMM EDO module (8MB)	.\$15.95
	6116P-1	24	2K x 8	100ns (16KB) CMOS 1.6 9		130711	JEED07216	72	4M x 32	60ns SIMM EDO module (16MB)	34.95
	6116P-2	24	2K x 8	120ns (16KB) CMOS1.59			JEED07232	72	8M x 32	60ns SIMM EDO module (32MB)	64.95
	6116P-3	24	2K x 8	150ns (16KB) CMOS1.49			P361000-XX-6		1M x 36	60ns SIMM module (4MB)	
42737		24	2K x 8	100ns (16KB) LP CMOS 2.1 9			P362000-XX-6		2M x 36	60ns SIMM module (8MB)	
	6116LP-2	24	2K x 8	120ns (16KB) LP CMOS 2.0 9					4M x 36	60ns SIMM module (16MB)	
	6116LP-2	24	2K x 8	150ns (16KB) LP CMOS1.99			P364000-XX-7		4M x 36	70ns SIMM module (16MB)	
42753	6264P-10	28	2K x 8	100ns (64KB) CMOS2.39			8MBX36-60	72	8M x 36	60ns SIMM module (32MB)	
42921		28	8K x 8	120ns (64KB) CMOS 2.2 9			4MBX64SDRAN		4M x 64	10ns Synch. DRAM DIMM (32MB)	
85121	6264LP-70	28	8K x 8	70ns (64KB) LP CMOS2.99			8MBX64SDRAN		8M x 64	10ns Synch. DRAM DIMM (64MB)	
	6264LP-10	28 28	8K x 8	100ns (64KB) LP CMOS2.79			16MBX64SDRAN		16M x 64	10ns Synch. DRAM DIMM (128MB)	
	6264LP-10		8K x 8	120ns (64KB) LP CMOS 2.4			421000A9B-70		1M x 9	70ns SIMM module	
		28 19					94000S-60	30	4M x 9	60ns SIMM module	
43238		18 29	1K x 4	350ns CMOS (M58981P)2.99			94000S-70	30	4M x 9	70ns SIMM module	
41970	43256-10L	28	32K x 8	100ns low power (NEC)4.99			94000S-80	30	4M x 9	80ns SIMM module	
41768	43256-12L	28	32K x 8	120ns low power (NEC)4.49	, J.YO	1484/8	16MBX9-60	30	16M x 9	60ns SIMM module	ა4.95

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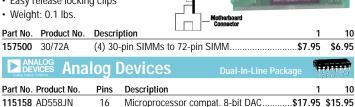
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We carry major manufacturers - call for pricing on quantities over 100

SIMM to SIMM Converter Card

- · Converts (4) 30-pin SIMMs to (1) 72-pin SIMM
- · Memory size and speed must match
- · Easy release locking clips



AD620AN	8	Low cost instrument amplifier17.95	15.95
AD633JN	8	Low cost analog multiplier12.95	11.95
OP27GP	8	Low noise prec. op amp (-40°C to 80°C)1.95	1.75

Individual spec sheets available for all above devices (\$1.00 each)

Dallas Semic	ono	ductor Chips Dual-In-Line Package	111111
114198 DS1210	8	Nonvolatile controller chip\$3.95	\$3.59
114219 DS1213C	28	SmartSocket 64K/256K bit13.95	12.95
133410 DS1216C	28	Smartwatch/RAM 64K/256K22.95	20.95
114260 DS1220Y-150	24	16K nonvol. SRAM 10%pwr, 4.25V WP9.95	8.95
114278 DS1225AB-150	28	64K nonvol. SRAM 5%pwr, 4.62V WP12.95	10.95
114286 DS1225AD-150	28	64K nonvol. SRAM 10%pwr, 4.37V WP11.95	10.95
157307 DS1225D-100	28	64K nonvol. SRAM 10%pwr, 4.5V WP10.95	9.95
114307 DS1225Y-200	28	64K nonvol. SRAM 10%pwr, 4.25V WP13.95	12.95
177113 DS1230Y-100	28	256K nonvol. SRAM 10%pwr, 4.37V WP17.95	15.95
114323 DS1230Y-150	28	256K nonvol. SRAM 10%pwr, 4.37V WP17.95	15.95
114331 DS1232	8	Micromonitor chip2.75	2.55
133444 DS1286	28	Watchdog timekeeper (50-Byte RAM)16.95	14.95
76646 DS1287	24	Real time clock with RAM (MC146818A)5.95	5.39
114366 DS1287A	24	Real time clock with RAM & clear6.95	6.25
176778 DS1302	8	Trickle charge time keeping IC2.49	2.25
114374 DS1387	24	RAMified real time clock 4Kx89.95	8.95
114382 DS1620	8	Digital thermometer and thermostat5.49	4.95
133452 DS12887	24	Real time clock chip6.95	6.25
114403 DS80C320-MCG	40	High speed micro 25MHz11.95	10.95
Individual sp	ec she	ets available for all above devices (\$1.00 each)	

Epson Real Time Clock Modules

RTC58321B Specifications

- Frequency stability: ±50ppm
- Built-in 32.768kHz quartz crystal
- · Addressable counter start, stop, and reset function
- 12 or 24-hour format
 Automatic leap year setting
- Microprocessor compatible 4-bit data bus
 Standard 16-pin DIP package

Part No.	Product No.	Description	1	10	100
29591	RTC58321B	16-pin clock module	\$7.95	\$6.95	\$5.95

RTC72421B Specifications

- Frequency stability: ±50ppm
- The built-in quartz crystal makes board design easy
- Direct bus-compatibility (120 nsec access time)
 Interrupt masking
- 30 seconds error adjustment function 18-pin dual in-line plastic package

Part No.	Product No.	Description	1	10	100
95530	RTC72421B	18-pin clock module	\$6.95	\$5.95	\$5.59

Plastic IC Storage Tubes & Rubber Rail Stops

See page 110 for complete specs

* Prepackaged: please order in increments of 10 or 100 Part No. Prod. No. Description Wt. (lbs.) 1 29516 RIC20 Thin plastic rail .04...\$.49 \$.39 \$.29 **29524** RIC220 Wide plastic rail .07.... .49 29583 RRS Rubber stop .001*



CMOS PIC Microcontrollers

MICROCHII							Pac	Kage	11	
Part No.	Product No.	Pins	Conf.	Range	EPROM Bytes	RAM Bytes		1	10	100
145040	PIC12C508-04/P	8	OTP	4MHz	512 x 12	25B	5 \$1 .	.75	\$1.49	\$1.25
145058	PIC12C509/JW	8	EPROM	4MHz	1K x 12	41B	5 12 .	.95	11.95	10.95
144258	PIC12C509-04/P	8	OTP	4MHz	1K x 12	41B	5 1 .	.95	1.75	1.49
128338	PIC16C54A-04/F	18	OTP	4MHz	512 x 12	25B	12 2 .	.95	2.75	2.49
134172	PIC16C56-RC/P	18	OTP	20MHz	1K x 12	25B	12 3 .	.75	3.49	3.25
134181	PIC16C57/JW	28	EPROM	20MHz	2K x 12	72B	20 13 .	.95	12.95	11.95
145091	PIC16C74A/JW	40	EPROM	20MHz	14K x 14	192B	33 21 .	.95	19.95	17.95
145111	PIC16F84-04/P	18	Flash	4MHz	1K x 14	68B	13 5 .	.95	5.49	4.95
145120	PIC16F84-10/P	18	Flash	10MHz	1K x 14	68B	13 6 .	.25	5.75	5.39
176882	PIC16F877-20/P	40	Flash	20MHz	256 x 8	368B	33 9 .	.49	8.49	7.49

KAE Servo and Stepper Motor Controllers

Controllers operate from standard 8-bit serial interface (RS232 or RS485). Using RS485, any mix of up to 32 controllers may be operated from a single serial port. Complete documentation, Windows® example software and technical support is available from JR KERR Automation Engineering

web site: "www.jrkerr.com".

146472: PIC-SERVO Motion Control Chipset for DC Motors · PID servo control for DC motors with digital encoders

- 32-bit position, velocity, and acceleration resolution
- PWM and direction outputs connect to servo amplifier
- Two chip set (PIC-SERVO 28-pin and PIC-ENC 18-pin)
- 175901: PIC-STEP Motion Control Chip for Stepper Motors · Acceleration ramping in position and velocity mode
- 50,000 steps/second maximum step rate
- Step and direction outputs connect to full step, half step or microstepping drivers

175898: PIC-I/O General Purpose I/O Controller Chip

• 12 general purpose TTL I/O bits Three 8-bit analog inputs

Two pulse-width-modulated outputs

Part No.	Description	Pins	1	10	25
146472	PIC-SERVO chip set, 0.3" DIP	28/18	34.95	\$31.49	\$27.95
175901	PIC-STEP chip, 0.3" DIP	28	.24.95	23.95	22.95
175898	PIC-I/O chip, 0.3" DIP	28	.20.95	19.95	18.95

Encoders/Decoders Part Product Number Number Pins Description 10 **123730** HT12E Encoder 12-bit\$1.69 \$1.49 \$1.25 Decoder 8-bit address / 4-bit data1.69 123748 HT12D 18 1.49 1.25 126594 HT640 Encoder 10-bit address / 8-bit address/data 2.95 24 2.75 2.49 Decoder 10-bit address / 8-bit latch data2.95 **126607** HT648L 24 2.75

E-Lab Digital Interface ICs

Stepper Motor Drivers These stepper motor drivers are designed to interface a logic level input byte to a stepper motor. Unipolar and bipolar versions.

Part No.	Part No. Product No. Pins Description 1						
141532	EDE1200	18	Unipolar stepper motor driver\$8.95	\$7.95	\$6.95		
157526	EDE1204	18	Bipolar stepper motor driver8.95	7.95	6.95		
		K	Keypad Encoder	EDE	1144		
This Keypad Encoder IC is designed to interface a matrix type 4							
row x 4	3 □ +5V 4 □ +5V	OSC1 16 OSC2 15					
other ho	st processo	r. Å oı	ne wire serial or 4 wire parallel interface		+5V 14 C3 13		
returns	the key pres	s data	and can be used in conjunction with a	7 🗆 R1	C2 🗆 12		
"data va	8 □ R2 9 □ R3	C1 11 C0 10					
Dart No	Droduct No	Dine	Description 1	10			

Keypad Encoder

data va	data valid signal for polled or interrupt-driven applications.						
Part No.	Product No.	Pins	Description 1	10	50		
171969	EDE1144	18	Keypad Encoder\$6.95	\$6.25	\$5.59		
_							

Serial LCD Interface

This Serial LCD Interface IC has been designed to provide a cost-effective LCD control solution for a wide variety of embedded designs. Allows nearly any-text based LCD module to be controlled via a simple one-wire data link.

art No.	Product No.	Pins	Description 1	10	50
71951	EDE702	18	Serial LCD Interface\$8.95	\$7.95	\$6.95



Princeton Technology Controller ICs

An infrared remote control transmitter utilizing CMOS technology, capable of 18 functions and a total of 75 commands

Part No.	Product No.	Pins	Description 1	10	100
173041	PT2248	16	IR remote control transmitter \$1.95	\$1.75	\$1.49

An infrared remote control receiver utilizing CMOS technology, capable of controlling 18 functions. A remote control system can be constructed using this chip and the PT2248 (P/N 173041).

Part No.	Product No.	Pins	Description 1	10	100
173059	PT2250A	24	IR remote control receiver\$1.95	\$1.75	\$1.49

An electronic volume controller IC utilizing CMOS technology specially designed for use on audio equipment. It has 2 built-in channels making it ideally suitable for mono and stereo sound applications. Provides the loudness function, wide frequency response range, and very low total harmonic distortion.

Part No.	Product No.	PIIIS	Description		10	100
173024	PT2256	16	Electronic volume controller.	.\$1.95	\$1.75	\$1.49
A silicon gate CMOS-processed digital echo IC functionally compatible						
with M50195P. Input signal to this chip is converted to digital signal with						
A-D conversion and then stored in the memory (DRAM) chip. After a						

certain delay time, the digital signal is read out from the memory chip and then converted back into analog signal using the D-A conversion. Product No. Pins Description 100

40 Enhanced digital echo\$5.95

A high performance electronic fan controller LSI. Speed control, off-timer, rhythm wind, sleep mode, head swing and/or light control are all built into a single chip. Indicator LED output, buzzer output, key with control output, as well as remote control decoding circuitry are all provided to build a full function electronic fan with remote control.

Part No.	Product No.	Pins	Description 1	10	100
173016	PT2128A-C81	24	Remote fan controller\$1.49	\$1.25	\$.99

80C52-BASIC Microcontroller

The 80C52-BASIC chip is a custom-masked 80C52 microcontroller with a full-featured 8K-byte ROM-resident BASIC-52 interpreter.

Hardware: • On-chip oscillator and clock circuit

Operates DC to 12MHz
 256 x 8-bit RAM

Software: • Full BASIC interpreter in ROM on a single chip

• "Stand-alone" software development

· Interrupts can be handled by BASIC or Assembly Language

Part No. Product No. Description 50 125647 80C52BASIC CPU 8-bit CMOS w/ BASIC interpreter \$19.95 \$17.95 \$15.95

The 8052 Microcontroller Idea Book (1997) and BASIC-52 Reference Book (1997)

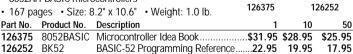
i ne Microcontroller Idea Book

126375:

173032 PT2395

- Circuits, programs and applications featuring the 8052-BASIC single chip computer
- 277 pages Size: 7.8" x 10.5" Weight: 1.6 lbs. 126252:
- Complete reference to programming 80C52-BASIC and

8052AH-BASIC microcontrollers



Software Disk for BASIC-52 Book

• 3.5" disk of circuit examples for P/N 126252 • Weight: 1.0 lb.

Part No.	Product No.	Description 1	10	25
126295	SFT52	BASIC-52 3.5" disk \$9.95	\$8.95	\$7.95



Voice Chips

Single-Chip Voice Record/Playback Devices

10 to 240 SECOND DURATIONS (28-pin DIP)

- · Easy-to-use single-chip voice record solution
- · Single voltage operation
- +5V (4.5V to 5.5V operating range)
- · Manual switch or microprocessor controllable
- · Playback can be edge- or level-activated · Directly cascadable for longer durations
- Zero-power message storage eliminates battery backup circuits
- Automatic power-down (push-button mode) • P/N 141647: 3VDC @ 30mA
- 1 µA standby current (typical) Fully addressable to handle multiple messages
- 100-year message retention (typical) 100K record cycles (typical)
- On-chip automatic gain control (AGC) · On-chip clock source

Part No.	Product No.	Description	1	10	50
141671	ISD1110P	Voice record/playback (10 sec.)\$	4.95	\$4.49	\$3.95
107334	ISD1420P	Voice record/playback (20 sec.)	.5.95	5.39	4.95
120643	ISD2560	Voice record/playback (60 sec.)	.9.95	8.95	7.95
120660	ISD2590	Voice record/playback (90 sec.)	9.95	8.95	7.95
141655	ISD25120P	Voice record/playback (120 sec.)	.9.95	8.95	7.95
141647	ISD33240P	Voice record/playback (240 sec.)1	2.95	11.95	10.95

National Semiconductor Digitalker™ Chip Set & Accessories

Applications: Language translations, telecommunications, clocks, teaching aids and automotive

The DT1050 is a standard DIGITALKER™ Chip Set encoded with 137 separate and useful words, 2 tones and 5 different silence durations.

· Weight: 0.1 lbs.

\$4.79

16491 includes: • (1) 74LS04 (14-pin)

- (1) Speech Processor Chip, MM54104N (40-pin) Master Word List
- (2) Speech ROMs, MM52164SSR1 (24-pin) and MM52164SSR2 (24-pin)
- · The recommended schematic diagram is included on the application sheet **16504** includes: • (1) 74LS04 (14-pin)
- (2) Speech ROMs, MM52164SSR5 (24-pin) and MM52164SSR6 (24-pin)

Part No.	Product No.	Description 1	10
16491	DT1050	Digitalker™ (4 chips)\$29.95	\$26.95
16504	DT1057	Vocabulary expansion (3 chips)19.95	17.95
14592	CY4	Required 4MHz crystal	.79

MingMicro Digital Voice Module

- 1M DRAM on board Plays 16 messages
- Selectable 16K/32K/44K bps sampling rate
- · 0.5W audio amp on board with volume control
- · All components soldered on board
- Power requirements: 6-12VDC, 200mA (P/N 100095 pg 89)

	u	i i oddct ivo.	Description	Weight		10	25
12	24871	DVM58D	Digital voice module	0.5 lbs	\$79.95	\$71.95	\$63.95

Video Text Display Module

NTSC composite (1Vp-p, 75 Ω)

- Serial data input: 2400~19.2Kbps
- Operating voltage:
- 12VDC @ 65mA typical (unregulated)
- · Auto-switching genlock overlay or internal video generation
- Power supply: +8~16VDC @ 65mA input, 5VDC aux. output (regulated)
- Displays up to 308 characters (11 lines of 28) 12 x 18 pixel character pattern
- Compatible w/ Parallax Basic Stamp® 30-pin SIMM for factor (socket supplied)
- Asychronous serial input only @ 9600bps Size: 3.5"L x 1.1"H Wt.: 0.3 lbs.

Part No.	Product No.	Description 1	10	25
162051	BOBII	Video text display module\$79.95	\$71.95	\$63.95





SX Blitz Programmer

· Type Ctrl-R from the SX Key software and your code assembles, downloads, and executes in your project



- SX software provides a simple and powerful SX Parallax mnemonics assembly language development environment
- Includes: SX Blitz, software, code and documentation on diskette, sample SX18AC/DP
- Size: 1.8"L x 0.5"W (DE-9 connects to serial cable. other end into project) · Weight: 0.1 lbs.

Parallax No. Part No. 45170.....**\$79.95** 162958

50MIPS SX Microcontrollers

SX18AC/DP and SX28AC/DP

The fastest 8-bit microcontroller in the world. Runs at an amazing 50 million instructions per second. Features:



\$71.95

- · Single cycle instruction execution
- 2048 x 12 bits E2/Flash program memory rated for 10,000 rewrite cycles
- Supports in-system debugging and programming
- Internal R4 MHz R/C oscillator

Part No.	Parallax No. 1	10	
162940	SX18AC/DP (18-pin DIP pkg)\$5.25	\$4.75	
162931	SX28AC/DP (28-pin DIP pkg) 5.49	5.25	

Tech Tools PIC16C5X / XX **Programmer Pack** (Version 5.0, Windows® Software)

Programs, reads & verifies PIC16CXX devices!

- · Supports PICs: 54, 55, 56, 57, 58, 620, 621, 622, 61, 62, 63, 64, 65, 71, 72, 73, 74 and 84
- · Requires 40-pin ZIF adapter (P/N 133911 - below)
- Programmer can be 168807 upgraded and adapters available depending on PIC
- Requires IBM PC or compatible, serial port and Windows® operating system
- · Includes PIC writer programming module, PIC writer serial protocol adapter, modular data cable, 12VAC @ 500mA power supply, PIC writer installation diskette, and Tech Tools CD-ROM
- · Documentation on CD-ROM · Wt: 1.8 lbs.

Part No.	Description 1	10
168807	PIC16CXX prog. pack \$199.95	\$179.95
133911	40-pin ZIF adapter49.95	44.95

GrowBot Kit

BASIC Stamp II - Controlled Robot

Features:

- · Intermediate level · Standard I/O devices
- include a bumper, photo-resistor light sensors, a piezo speaker, LED lights, and servo drivetrain
- Another way to learn how to use a BASIC Stamp II
- · Includes BS2-IC module, software, and documentation · Module board not included
- Size: 5.5"L x 3.0"W x 3.0"H Weight: 1.5 lbs. Part No. Parallax No.

10 162501 29100.....**\$219.95 \$209.95**

Difficulty Level

Intermediate

Board of Education

Features:

Mechanically interlocked power supply prevents dual connection of wall-pack and battery



DE9 connector for BS2-IC programming and serial communication during run-time

- BS2-IC P0 P15 I/O pins, Vdd and Vss connections brought adjacent to 2" x 1 3/8" breadboard area
- Includes set of ten (10) color-coded pluggable 22 gauge wires
- Traces on top of the board show connections between BS2-IC and breadboard connections
- Requires the BS2-IC module (sold separately see opposite page P/N 130892 & 159775)
- Size: 4.0"L x 3.0"W Weight: 0.2 lbs

Part No.	Parallax No. 1	10
162536	28150 \$59.95	\$53.95

Earth Measurements

In this set of experiments you will build a complete light, air





temperature, ground temperature data

logger. You'll also learn how to control a water pump in a closed-loop feedback system.

· Module board not included

Part No.	Parallax No.	1	10
170106	28153	\$64.95	\$59.95

BASIC Analog and Digital

Designed to provide you with an overview of the concepts involved in converting analog signals into digital data that the BASIC



Stamp can understand. The experiments include Basic Analog to Digital Conversion, BASIC Digital to Analog conversion, Advanced Analog to Digital Conversion, Digital control of Analog Devices, and Analog Input Signal Conditioning.

· Module board not included

72 Piece Part Kit Includes:

· Leds (4), resistors (33), potentiometers (2), tack switches (2), capacitors (4), photo-resistors (2), jumper wires (20), ICs (3) and piezo speakers (2)

Part No.	Parallax No. 1	10
170122	28155\$39.95	\$35.95

Sound Module Appkit

The sound module is a small recording and playback studio, with an 8KHz bandwidth. Up to 60 seconds of sound may be recorded on this device, either as one message or several discrete



messages. Eight messages are allowed and may be individually recorded and played back using a BASIC Stamp or any other intelligent device capable of RS-232 communication.

Size: 2.5"L x 2.5"W x 1.0"H Parallax No. 29111\$89.95 79.95

What's A Microcontroller? Student Workbook and Parts Kit

Features:

- Introductory programming to blink a LED, and activate blinking LEDs with buttons
- Control a servo motor using a photoresistor as an input
- Implementing a 555 timer to off-load tasks from the BASIC Stamp
- · Book contains schematic, pictorials and explanation of six projects
- Components required for six projects described in Microcontroller Book
- Module board not included
- Difficulty level: beginner
- Size (book): 7.7" x 8.8" Weight: 0.4 lbs.

Part No.	Parallax No. 1	10
171264	28152 \$44.95	\$39.95

Robotics Kit and Book

Build a BOE-BOT by adding a chassis. servo motors, a power supply, and proximity





sensor to your Board of Education. Experiments cover basic programming and servo control, sensor interfacing using an infrared LED and receiver, light following,

and communication between BOE-BOTs. Requires BS2 starter kit (P/N 140071, pg 21)

Part No.	Parallax No.	1	10
170131	28154	\$109.95	\$99.95

Industrial Control Kit and Book

Methods of process control (on-off, differential gap, proportional-integralderivative) are demonstrated in detail using a simple desktop heater system consisting of



a film canister with a temperature sensor (LM34 probe) and a heat (1/2 Watt 47 ohm resistor). 26 piece kit

Size: (book) 7.6" x 8.5"
 Weight: 1.2 lbs.

Part No.	Parallax No.	1 10
176575	28156 \$49.9 !	5 44.95

SX Tech Tool Kit

Includes:

 SX-Kev Rev. F. SX Tech board, SX-Key manual, (2) SX8AC/DP chips, (1) 50MHz resonator, 7.5VDC @ 1A power supply, serial cable,



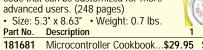
software and source code on CD-ROM Size: (book) 7.6" x 8.5"
 Weight: 2.3 lbs.

Parallax No.

176583 45180\$**179.95** 169.95

The Micro-Controller Application Cookbook (2000)

Woodglen Press - This cookbook is a collection of interface circuits. It is an instant reference to circuits as well as a variety of simple circuits and interface code that can be customized for more







127693

PARALLAX ₹ BASIC Stamp AppKits

Parallax AppKits include the materials and parts you need to learn about interfacing electronic devices to BASIC Stamp I and II computers and PIC microcontrollers. Each kit contains the sample device and supporting parts and



source code written for BASIC Stamps and PICs. · Weight: 0.2 lbs. One-year warranty

• For new Parallax Plus Pack App Kit see page 37

	A / 7 OI A		
146448	27916	24.95	22.49
146430	27915	24.95	22.49
146456	27917	\$24.95	\$22.49
Part No.	Parallax No.	1	10

PARALLAX ₹ Stamp Activity Board

The BASIC Stamp acitvity board is a demonstration board for Parallax BASIC Stamp computers (BS1-IC and BS2-IC modules). Sample source code is included.



· Four push buttons let you simulate inputs

· Four LED's indicate the status of the outputs 32Ω speaker outputs frequencies: 500 to 8KHz

· Potentiometer gives you analog output

• A/B sockets support many 8-pin DIP ICs including: EEPROMs, ADCs, digital thermometers, etc.

• X-10 interface via RJ11 connection

· Supports BS1-IC and BS2-IC

 Includes manual, power supply, and sample source code diskette One-year warranty

• PCB size: 4.0"L x 2.8"W • Weight: 0.7 lbs.

149032	27905 \$79.95	\$71.95
Part No.	Parallax No. 1	10

SOLUTIONS CUBED RAM Pack B Module

The RAM Pack B module allows addressable access to 8Kbx8 bits of RAM. An autobaud detect function supports communication at 1200-19200 baud rates without the use of hardware jumpers. A software com-



mand allows the RAM Pack B to be expanded to handle 32Kbx8 RAM. An additional FIFO (firstin-first-out) buffer mode has been included. This function allows sequential storage of data in RAM without the need to address the RAM. RAM comes socketed for easy replacement with NVRAM or 32Kbx8 RAM. Weight: .04 lbs.

Part No. Description 143811 6-pin RAM Pack B module\$29.95 \$26.95

SOLUTIONS CUBED Pocket Watch B Module

The Pocket Watch B module is an enhanced, pin for pin replacement of the Solutions Cubed Pocket Watch, It contains a real time clock, a calendar, and advanced timing features. The real-time clock module keeps track of



seconds, minutes, hours, days, months, and years.

For use with P/N 130892 (above)

· Leap year compensation

• Easy to use 1 or 2 wire interface

Four types of user configurable alarms

· Externally accessible, precision timebase

Standard TTL levels • Easy to use SIP package

• Size: 1.0"L x 1.0"W • Wt.: .05 lbs. • One-year warranty Part No. Description

145630 Pocket watch B module......\$24.95 \$22.49

PARALLAX & BASIC Stamps

BASIC Stamps are small computers using a variation of BASIC, called PBASIC to control execution of many applications. The BS1-IC has 8 I/O lines, while the BS2-IC has 16 I/O lines which can be connected directly to buttons, LEDs, registers, and many other TTL level devices. Each allows you to store data in the EEPROM before downloading a BASIC program. Thousands of BASIC Stamps are in use by hobbyists and professionals!



and 5V regulator ee page 36 for Embedded BASIC plus erial LCD Modules

la stancetter esta	S	Serial LCD Modules		
instruction sets				
Specifications:	BS1-IC (127693) BS2-IC (130892)		
EEPROM	256 bytes	2048 bytes		
RAM	14 bytes	26 bytes		
Max. prog. length	80 instructions	500 instructions		
Clock speed	4MHz	20MHz		
Program speed	2000/sec.	4000/sec.		
Max I/O speed	2400 baud	50K byte		
Package	14-pin SIP	24-pin DIP		
PC Interface	Parallel	Serial		
Size	1 4"L x 0 4"W	1 2"L x 0 6"W		

140062: BASIC Stamp®1 Starter Kit w/ BS1-IC (27205) Design your project today using the BASIC Stamp 1. Includes a BS1-IC, super carrier board, manual, software and programming cable. 140071: BASIC Stamp®2 Starter Kit w/ BS2-IC (27203) Take advantage of all the cool features of the BASIC Stamp 2. Includes the BS2-IC, super carrier board, manual, software & programming cable.

Part No.	Parallax No.	Wt. (lbs.)	1	10
127693	BS1-IC	0.01 \$34.9	5	\$31.49
130892	BS2-IC	0.01 49.9	5	44.95
140062	27205	2.2 99.9	5	94.95
140071	27203	1.9 149. 9	5	134.95

IIRIBY ELLECTRONICS

Stamp II I/O Test Board

· Compatible w/ P/N 130921 (above)

No separate power required

16 pull down resistors

16 low current LEDs

16 miniature switches for I/O pins

16 DIP switches for latching I/O to high state

Size: 4.1"L x 2.1"H
 Weight: 0.1 lbs.

Part No. Description 10 Stamp II I/O test board\$59.95 \$54.95 158107

SOLUTIONS CUBED Motor Mind B Module

Motor control is simplified to a one or two line serial communication stream. DC motors with operating voltages as great as 30VDC and continuous currents of 2A can be controlled. An on board frequency counter has a range of 0-65, 528Hz. Motor speed (254 steps) and



direction can be controlled. Motors with tachometers or encoders may make use of the automated speed control function. • Wt.: 0.03 lbs.

Part No. Description 143802 9-pin motor mind B module ... \$29.95 \$26.95

PARALIAX A

50MHz BASIC Stamp IISX Module

Parallax used the new Scenix Semiconductor SX microcontroller to add power to their popular BS2-IC module. Features:



Execution of 10,000 PBASIC instructions per second (2.5X the speed of the BS2-IC)

2 x 8K bytes of EEPROM (16K bytes total) to handle a total of 4,000 lines of code

The BS2SX-IC is pin-compatible with the BS2-IC and executes a superset of instructions

Size: 1.2"L x 0.6"W · Weight: 0.01 lbs. Part No. Parallax No. 10 BS2SX-IC**\$59.95 \$56.95 \$49.95** 159775

PARALLAX R

Stamp Module Carrier Boards

Optional boards for BS1-IC, BS2-IC and BS2SX-IC stamps.

· Easy use of stamp with prototyping area, 9-volt battery clips, I/O header, reset button, and programming connector

· Weight: 0.1 lbs.



164726

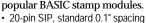
183062

130921: Use w/ P/N 130892 (left) • 3.0"L x 2.6"W 164726: Use w/ P/N 127693, 130892 (left) and P/N 159775 (above) • 4.0"L x 3.0"W

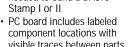
Part No.	Parallax No.	1	10
130921	27120\$	19.95	\$18.95
164726	27130	49 95	44 95

PAPALLAX ₹ Basic Stamp 0EM Kits

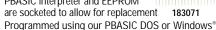
The OEM BASIC Stamp is a through-hole version of the popular BASIC stamp modules.



Includes the PBASIC interpreter, EEPROM, resonator, DB-9, and all the resistors and transistors needed to build a BASIC



visible traces between parts PBASIC interpreter and EEPROM



editor just like the BASIC Stamp modules

Part No.		No.	Price
183062	27296	BS1 OEM kit	\$39.95
183071	27291	BS2 OEM kit	44.95

SOLUTIONS CUBED **MEMKEY 4x5 Keypad Encoder** Module (Serial and PC/AT)

For 4x5 matrix keypads

· PC/AT or serial output

· Standard TTL levels

· 64 bytes of user

accessible EEPROM

· Programmable rows & columns

· Programmable key values

· Programmable debounce and typematic times

· Automatic or polled key reporting

· No external components and easy to use SIP package

· For use with P/N 130892 BS2-IC (left above) Compatible with keypad P/N 160071 (pg 48)

Size: 2.3"L x 1.6"W • Weight: .0.2 lbs.

Part No. Description 163758 Keypad encoder module......\$34.95 \$31.95





every kit!

Kits include the Most Popular Components and Cabinets with extra drawers for your Customized Expansion



84996 (shown)

Each Kit includes a 20 Drawer Component Cabinet (81701), 20 clear plastic drawers (85454), 20 clear dividers (85446), 30 adhesive labels for drawers to identify parts in kit, all Electronic Components listed in each kit.

Cabinet size: 6.0"L x 15.0"W x 7.9"H (81701)

• Drawer size: 5.5"L x 2.7"W x 1.5"H

 Cabinet: ABS-Black • Weight: 4.6 to 6.4 lbs. Cabinet is wall-mountable or free standing

Each Refill Package includes all Electronic Components listed in each kit, each group of Components separately packaged.

Refill package does not include Cabinet (81701 – pg 110)





108433 (shown)

LEDs & LED Mounting Hardware Kit

	and specs	\$85 VALUE			
Includ	Includes 560 pcs. (20 types) LEDs and mounting				
10 each	10 each	10 each	10 each	100 each	
BG209	BR5704	XC209G	XC556G	LMH100	
BR209	CTP280	XC209Y	XC556Y	LMH200	
BY209	HLMT-CL00	XC410G	XC5410	XC209R	
BG5704	XC52RG	XC410R	XC5491	XC556R	
Part No.	Description	Wei	ight 1	10	
84996	560 pc. LED & Hard	ware kit 5.0	lbs \$59.95	\$53.95	

	,	400 S er	ies ic ki	\$1	60 VALUE
Includ	les 350 pcs.	(30 types)	7400 (TTL) I	ntegrated	Circuits
10 each	10 each	10 each	10 each	10 each	20 each
7402	7416	7438	74107	74157	7400
7405	7417	7447	74123	74160	7404
7408	7420	7470	74132	74174	7406
7410	7430	7485	74151	74175	7407
7414	7432	7495	74153	74279	7474
84953	350 pc. 740	00 series IC	kit 6.2 lbs.	\$129.95	\$116.95

74LS00 Series IC Kit \$137 VALUE						
Includ	es 420 pcs. (3	5 types) 74LS	S (TTL) Integrate	d Circuits		
10 each	10 each	10 each	10 each	20 each		
74LS05	74LS73	74LS125	74LS193	74LS00		
74LS10	74LS75	74LS139	74LS240	74LS02		
74LS11	74LS85	74LS151	74LS244	74LS04		
74LS14	74LS86	74LS155	74LS245	74LS08		
74LS20	74LS90	74LS157	74LS273	74LS32		
74LS30	74LS93	74LS174	74LS373	74LS74		
74LS47	74LS123	74LS175	74LS374	74LS138		
84961	420 pc. 74LS	series IC kit	6.7 lbs. \$109.9 5	\$99.95		
130391	Refill for 8496	61(420 pc.)	2.0 lbs 94.9 5	85.95		

741 000 0 10 1/1

CI	04000 Seri	es IC Kit	t (CMOS) 🏻	\$99 VALUE
Include	es 300 pcs. (25 t	ypes) CD4000	O Series Integra <mark>t</mark>	ed Circuits
10 each	10 each	10 each	10 each	20 each
CD4015	CD4024	CD4051	CD4093	CD4001
CD4016	CD4027	CD4069	CD4511	CD4011
CD4017	CD4040	CD4070	CD4538	CD4013
CD4020	CD4046	CD4071	CD4543	CD4049
CD4023	CD4050	CD4081	CD4584	CD4066
84970	300 pc. CD4000	series IC kit	6.1 lbs \$79.9	5 \$71.95
130403	Refill for 84970) (300 pc.)	1.4 lbs 64.9	5 57.95

Linear Series IC Kit \$191 VALUE					
Includes 48	0 pcs. (40 ty	pes) Linear	Series Integrate	d Circuits	
10 each	10 each	10 each	10 each	20 each	
TL072CP	LM337T	LF412CN	ULN2803A	LM317T	
TL074CN	LF353N	LMC555CN	NE5532	LM324N	
TL082CP	LF356N	LM556N	7808T	LM339N	
TL084CN	LM358N	LM723CN	78L12	LM741CN	
MAX232CPE	LM386N-1	LM1458N	7815T	LM555CN	
LM301N	LM386N-3	LM1488N	7905T	7805T	
LM308N	LM393N	LM1489N	7912T	78L05	
LM311N	LF411CN	ULN2003A	7915T	7812T	
84988 480	pc. Linear se	ries IC kit	6.0 lbs. \$169.95	\$152.95	

Low Profile IC Socket Kit 542 VALUE						
Incl	Includes 300 pcs. (10 types) Solder tail (Tin) IC Sockets					
10 each	20 each	20 each	50 each	50 each		
22LP	18LP	28LP	8LP	16LP		
24SLP	24LP	40LP	14LP	20LP		
85075	300 pc. LP IC	Socket kit	5.5 lbs \$34.95	\$31.95		

130411 Refill for 84988 (480 pc.) 1.3 lbs. ..154.95 139.95

1/8 Watt Carbon Film Resistor Kit Includes 540 pcs. (30 values) 1/8 watt 5% Resistors						
10 each	10 each	10 each	10 each		50 each	
10Ω	470Ω	3.3KΩ	27ΚΩ		100Ω	
47Ω	680Ω	5.1KΩ	$33K\Omega$		220Ω	
150Ω	1.5 K Ω	5.6 K Ω	47ΚΩ		1ΚΩ	
270Ω	$2K\Omega$	6.8 K Ω	470KΩ		$4.7K\Omega$	
330Ω	2.2 K Ω	$15K\Omega$	1MegΩ		10 K Ω	
390Ω	$2.7K\Omega$	$22K\Omega$	10Meg	2	100ΚΩ	
Part No.	Description		Weight	1	10	
108329	540 pc. 1/8 watt	Resistor kit	4.9 lbs\$27	.95	\$24.95	
108302	Refill for 10832	9 (540 pc.)	0.2 lbs 12	.95	24.95	
1/4 Watt Carbon Film Resistor Kit 532 VALUE						

	7 i Hatt Garbon i inn itoolotoi itit						
Inc	ludes 540 pcs.	(30 values)	1/4 watt 5% Resi	istors			
10 each	10 each	10 each	10 each	50 each			
10Ω	470Ω	2.7ΚΩ	22ΚΩ	100Ω			
47Ω	Ω 086	$3.3K\Omega$	33KΩ	220Ω			
150Ω	1.2ΚΩ	5.1KΩ	47ΚΩ	1ΚΩ			
270Ω	1.5KΩ	5.6KΩ	470ΚΩ	$4.7K\Omega$			
330Ω	2KΩ	15ΚΩ	1 Meg Ω	10ΚΩ			
390Ω	2.2ΚΩ	20ΚΩ	10MegΩ	100ΚΩ			
81832	540 pc. 1/4 watt	Resistor kit	4.9 lbs\$27.95	\$24.95			
103165	Refill for 81832	2 (540 pc.)	0.2 lbs 12.95	11.49			

1/2 W	att Carbon	Film Re		\$36 VALUE
Inc	ludes 540 pcs.	(30 values)	1/2 watt 5% Res	istors
10 each	10 each	10 each	10 each	50 each
10Ω	470Ω	3.3 K Ω	$27K\Omega$	100Ω
47Ω	Ω 086	5.1 K Ω	33KΩ	220Ω
150Ω	1.5KΩ	5.6 K Ω	47ΚΩ	1ΚΩ
270Ω	$2K\Omega$	6.8 K Ω	470 K Ω	4.7 K Ω
330Ω	2.2ΚΩ	$15K\Omega$	$1 {\sf Meg} \Omega$	$10 \text{K}\Omega$
390Ω	2.7ΚΩ	22ΚΩ	10Meg Ω	100ΚΩ
107879	540 pc. 1/2 wat	Resistor kit	5.1 lbs \$29.95	\$26.95
107852	Refill for 10787	79 (540 pc.)	0.4 lbs 14.95	13.49

1/2 Watt Single Turn Cermet Pot K<u>it</u>

	,	80 VALUE		
Include	s 100 pcs. (10 valu	es) ¹ /2 watt L	inear Taper Pote	ntiometer
10 each	10 each	10 each	10 each	10 each
63P500	63P5K	63P500K	63P1K	63P50K
63P2K	63P20K	63P1Meg	63P10K	63P100K
85032	100 pc. single to	ırn Pot kit 4.	9 lbs \$59.95	\$53.95
	21			

3/4 Watt 15 Turn Cermet Pot Kit See page 46 for photos and specs

Includes 100 pcs. (10 values) ³ / ₄ watt Linear Taper Potentiometer					
10 each	10 each	10 each	10 each	10 each	
43P500	43P5K	43P500K		43P50K	
43P2K	43P20K	43P1Meg	43P10K	43P100K	
85041	100 pc. 15 turn	Pot kit	4.9 lbs \$79.95	\$71.95	

Switch Assortment Kit \$121 VALUE

See pages 49-52 for photos and specs Includes 150 pcs. (15 types) PB, Slide, Dip & Toggle Switches						
10 each	10 each	10 each	10 each	10 each		
206-4	JMT121	JMT223	MPC221	MS103		
206-8	JMT123	MPC121	MPC223	SDTX620k		
JMT113	JMT221	MPC123	MS102	SW153		
85059	150 pc. Switch kit	t	5.0 lbs \$89.9	5 \$80.95		

Hardware, Spacer and Standoff Kit Includes 2400 pcs. (24 types) Spacers, \$71 VALUE Standoffs, Nuts, Flat, Tooth & Lock Washers and Slotted PH Screws

100 each	100 each	100 each	100 each	100 each	100 ea	ich
Spacers	Hex nuts	Flat,	Int. tooth,	Split lock	PH machi	ne screws
_	2-56	_	_	#2	2-56 x	1/4, —
4-40	4-40	#4	#4	#4	4-40 x 1	1/4, 1/2
6-32	6-32	#6	#6	#6	6-32 x ²	1/4, 1/2
8-32	8-32	#8	#8	#8	8-32 x 3	3/8, 1/2
108433	2400 pc	. Hardwa	re kit	7.5 lbs.	\$59.95	\$53.95
20407	Dofill to	- 100 / 22	(2400 pg)	1 2 7 lbc	44 OF	20.00

Ceramic Capacitor Kit \$39 VALUE						
Includes 520 pcs. (10 values) 50v ±20% Ceramic Disc Capacitors						
20 each	20 each	20 each	100	each	100 each	
10pf	47pf	470pf	.02	2μf	.01µf	
22pf	100pf	.001µf	.04	7μf	.1µḟ	
Part No.	Description	•	Weight	1	10	
81859	520 pc. Cera	mic Cap. kit	5.0 lbs.	\$29.95	\$26.95	
130232	Refill for 818	359 (520 pc.)	0.3 lbs.	14.95	13.49	
Monolithic Capacitor Kit 542 VALUE						

Includ	es 280 pcs. (10 t)	pes) 50v ± 20°	% Monolithic Ceran	nic Caps
10 each	10 each	10 each	10 each	100 each
22pf	.001µf	.047µf	.47µf	.01µf
100pf	.0022µf	.22µf	1µf	.1µf
171475	280 pc. monol	ithic cap kit	5.0 lbs \$32.95 0.3 lbs 17.95	\$29.95
171483	Refill for 1714	75 (280 pc.)	0.3 lbs 17.95	15.95

	\$39 VALUE						
Includes 240 pcs. (15 values) ±20% Radial Electrolytic Capacitors							
10 each	10 each	20 each	20 each	20 each			
100µf 50	v 1000µf 16v	1μf 50v	3.3µf 50v	22µf 50v			
220µf 25	v 2200µf 25v	1µf 100v	4.7µf 50v	47µf 50v			
470µf 25	v 3300µf 25v	2.2µf 50v	10µf 50v	100µf 25v			
			5.3 lbs \$29.95				
130331	Refill for 81867	(240 pc.)	0.5 lbs 14.95	13.49			

l	Axiai	Capaci	tor Kit	\$46 VALUE
Includes	140 pcs. (10 val	lues) ±20% A	xial Electrolytic	Capacitors
10 each	10 each	10 each	20 each	20 each
47µf 50v	220µf 50v	1000µf 25\	/ 1μf 50v	10µf 50v
100µf 50	v 470 µf 50v	2200µf 16\	ν 4.7μf 50v	2.2µf 50v
81875	140 pc. Axial Ca	pacitor kit	5.3 lbs \$34.9 5	\$31.49
130340	Refill for 81875	(140 pc.)	0.6 lbs 19.9 5	17.95
	Mylai	r Capaci	tor Kit	\$48 VALUE

	,			J-10 .
Inclu	ides 280 pcs.	(10 values) 100	Ov ±10% Mylar Ca	pacitors
10 each	10 each	10 each	10 each	100 each
.001µf	.022µf	.047µf	.47µf	.01µf
.0047µf	.033µf	.22µf	1μf	.1µf
81883	280 pc. Myla	r Capacitor kit	5.1 lbs \$34.95	\$31.49
130358	Refill for 81	883 (280 pc.)	0.3 lbs 19.95	17.95

Tantalum Capacitor Kit 568 VALUE

				~
Includes	5 150 pcs. (15 va	lues) ±20% Dij	pped Tantalum Ca	pacitors
10 each	10 each	10 each	10 each	10 each
.1µf 35v	1µf 25v	3.3µf 35v	10µf 16v	22µf 16v
.22µf 35v	1µf 35v	4.7µf 35v	10µf 35v	33µf 25v
.47µf 35v	2.2µf 16v	6.8µf 35v	15µf 25v	47µf 25v
81841	150 pc. Tantalu	m Cap. kit 4	.8 lbs \$49.95	\$44.95
	Refilİ for 81841		.3 lbs 34.95	31.49

	See page 25 for photos and specs						
Includes 420 pcs. (15 types) Zener, Switching and Silicon Rectifiers							
10 each	10 each	10 each	10 each	100 each			
1N270	1N4001	1N4735	1N5408	1N914			
1N751	1N4007	1N4742	C106B1	1N4004			
1N3600	1N4733	1N5404	KBP04M	1N4148			
00507	400 D' I	1.9	F 0 II	405.05			

Diode Assortment Kit

Transistor Assortment Kit						
130366	130366 Refill for 82587 (420 pc.)		0.3 lbs 24.95	22.49		
			5.0 lbs \$39.95	\$35.95		
1N3600 1N4733 1N5404		KBP04M	1N4148			
1N751	1N4007	1N4742	C106B1	1N4004		
1N270	1N4001	1N4735	1N5408	1N914		

See page 28 for photos and specs

Inci	ludes 560 pcs	. (20 types) N	PN, PNP Transisto	rs
10 each	10 each	10 each	10 each	100 each
2N2222A	2N4401	MJE3055T	TIP31A	2N3904
2N2907A	2N4403	MPF102	TIP32A	2N3906
2N3053	2N5951	MPSA06	TIP102	PN2222
2N3055	2N7000	MPSA13	TIP120	PN2907
82595 56	60 pc. Transis	stor kit	5.1 lbs \$79.95	\$71.95
130374 R	ofill for 8250	5 (560 nc)	0.4 lbs 64.95	58 95

* LB grab bag quantities are approximate • Opened grab bags are not returnable • Use our 20 drawer cabinet w/ labels to store your components, P/N 81701 (pg 110)















135394 – Electrolytic	135394	- El	lectro	olvtic
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135271 – I FDs

169578 - Photocells

Wt (lbc)

18294 - Toy Motors

149649 - Fans

Part No. Product No. Description

114446 GB150

55968 - Spacers

81701 - Cabinet

0.2.....**\$5.95**

Wt. (lbs.)

Capacitors

Part NO.	Product No.	Description (Photo Above)	vt. (IDS.)		10		
17857	GB100★	200 asst. ceramic disc capacitors	0.2	\$4.95	\$4.49		
135335	GB100LB*	1 lb. (813pcs) asst. ceramic disc caps	1.0	14.95	13.49		
17881	GB101★	100 asst. mylar capacitors	0.3	4.95	4.49		
135458	GB101LB*	1 lb. (440pcs) asst. mylar capacitors	1.0	11.95	10.95		
17911	GB102★	100 asst. electrolytic capacitors					
		radial, axial, snap	0.5	4.95	4.49		
135394	GB102LB*	1.5 lb. asst. (300pcs) electrolytic capa	citors				
		radial, axial, snap (photo above)	1.5	12.95	11.49		
17945	GB103	100 asst. tantalum capacitors (dipped epoxy and solid tubular)	0.1	7.95	6.95		
	Diodes and Transistors						

Diodes and Transistors						
Part No. Product No.	Description	Wt. (lbs.)	1	10	25	
17961 GB107★	200 asst. diodes					
	(zener, switching, silicon)	0.1	\$5.95	\$5.35	\$4.79	
135440 GB107LB*	1 lb. (1650pcs) asst. diodes (zener, switching, silicon)	1.0	17.95	15.95	13.95	
18171 GB127★	100 asst. transistors (NPN, PNP, power)	0.1			4.79	

Trimmer and Single Turn Potentiometers

Part No.	Product No.	Description V	Vt. (lbs.)	1	10
18075	GB113★	100 asst. 1/10W to 1/8W trimmer pots (100 to $2M\Omega$ values)	0.1	.\$4.95	\$4.49
18278	GB174	100 asst. 1/4W & 1/2W single turn pots (100 to 5MΩ asst. values)	0.2	6.95	6.25
135407	GB174LB*	1 lb. (295pcs) 1/4W & 1/2W single turn	n		
		pots (100 to 5M Ω asst. values)	1.0	.14.95	13.49

Integrated Circuits & Sockets

	integrated circuits & sockets				
Part No.	Product No.	Description W	Vt. (lbs.)	1	10
17996	GB108★	100 asst. 7400, 74LS00 series			
		(74, 74C, 74F, 74S, 74ALS, 74HC, 74HCT)	0.2	.\$6.95	\$6.25
135280	GB108LB*	1 lb. (400pcs) asst. 7400, 74LS00 serie	es		
		(74, 74C, 74F, 74S, 74ALS, 74HC, 74HCT	1.0	.17.95	15.95
18024	GB109	100 asst. linear series (LM300, 500, 700,			
		7800, 7900 regulators) DIP, TO-3, TO-220	0.6	7.95	6.95
145242	GB109LB*	2 lb. (300pcs) asst. linear series			
		(LM300, 500, 700, 7800, 7900 regulators)	2.0	.17.95	15.95
114964	GB171	100 asst. microprocessor series			
		(micros, PALS, RAMs, PROMS, EPROMS)	0.7	9.95	8.95
105620	GB120★	100 asst. IC sockets (DIP IC, PGA, TO-3)	0.3	4.95	4.49
135386	GB120LB*	1 lb. (260pcs) asst. IC sockets			
		(DIP ÌC, PGA, TO-3)	1.0	.10.95	9.95

Surprise Component Grab Bag

Axial and radial electrolytics, monolithic, dipped silver mica and mylar capacitors, connectors, sockets, thermistors, LEDs, resistor networks, diodes, IC's, standoffs, transistors, oscillator/resonators, inductors, crystals, resistors, pots and switches (1075 pcs).



Part No.	Product No.	Description	1	10	25
135263	GB191LB ★ *	3 lbs. electronic components	\$14.95	\$13.49	\$11.95

Surprise Computer Products Grab Bag

Various electronic components (capacitors, connectors, sockets, LEDs, resistors, diodes, IC's transistors, pots, oscillators/resonators, inductors, crystals,

switches, etc.), cables, power supply, transformer, fan, PC board, keyboard and miscellaneous computer products.

Crystals/Oscillators

50 asst. crystals and oscillators

135415	GB150LB*	1 lb. (195pcs) asst. crystals & osci	II. 1.0	1	7.95	15.95
Part No.	Product No.	LEDs and Displays Description (Photo Above)	/t (lhs.)	1	10	25
18041	GB110★	100 asst. sizes and colored LEDs	0.1\$5.			
18323	GB186	500 asst. sizes #18041 LEDs	0.3 19.	95	17.95	15.95
135271	GB110LB*	1 lb. (1900pcs) asst. #18041 LEDs	1.044.	95	39.95	35.95
18201	GB162★	50 asst. sizes of colored displays (7-segment LED, modules, stick)	0.5 9.	95	8.95	7.95

135343 GB162LB* 1 lb. (110pcs) asst. #18201 displays 1.0 ..17.95 15.95 13.95 1/4W, 1/2W Resistors and Photocells

Part No.	Product No.	Description (Photo Above) W	/t. (lbs.)	1 10
18104	GB116★	200 asst. 1/4 watt resistors (5%/10%)	0.1 \$4.9	5 \$4.49
135351	GB116LB*	1 lb. (2200pcs) asst. 1/4 watt resistors	1.0 17.9	5 16.95
18139	GB117★	200 asst. 1/2 watt resistors (5%/10%)	0.2 4.9	5 4.49
169578	GB125	100 asst. sizes and values photocells	0.2 7.9	5 6.95

Switches, Toy Motors and Fans

I	Part No.	Product No.	Description (Photos Above)	Wt. (lbs.)	1	10
l	18235	GB165★	50 asst. switches (toggle, push button, rocker, slide)	0.4	¢7 05	¢6 05
ı			(toggle, push button, rocker, silve)	0.4	Ψ1.73	ψU.73
I	135378	GB165LB*	1 lb. (135pcs) asst. #18235 switches	1.0	17.95	15.95
I	18294	GB182★	5 asst. toy DC motors (1.5 – 12VDC)	1.1	3.95	3.49
I	149649	GB193	5 asst. used AC/DC fans (photo above)	4.5	9.95	8.95

Hardware Assortments

	 2-56 4-40 6-32 8-32 Washers Lock Washers Plastic Steel Brass Aluminum 	200	43	of I	T.
П	Part No. Product No. Description	Wt. (lbs.)	1	10	2
	171571 GB149 1 lb. (500pcs) asst. types, screw nuts, washers & lock washers	vs, 1.0	\$4 05	\$1.10	¢3 0
	171635 GB149LB*3 lbs. (1400pcs) asst. types	1.0	₽ 4 .73	Ψ4.47	Ψ3.7
	same as P/N 171571 (above)	3.0	10.95	9.95	8.9
П					

• Ro	und • He	Spacers and Standof	ffs · Alum	• Nylon •	Brass
Part No.	Product No	. Description (Photo Above)	Nt. (lbs.)	1 10	25
166481	GB440	100 asst. size 4-40 spacers/standoffs	0.5 \$6.9	5 \$6.25	\$5.59
166490	GB632	100 asst. size 6-32 spacers/standoffs	0.5 6.9	5 6.25	5.59
166502	GB832	100 asst. size 8-32 spacers/standoffs	0.6 6.9	5 6.25	5.59
55968	GB140★	100 asst. sizes, 4-40, 6-32, 8-32 round/hex, alum/brass/nylon spacers	s 0.3 7.9	5 6.95	6.25
135423	GR140I R3	1 lh (310ncs) same as P/N 55968	1 0 17 9	5 15 95	13 95

Schwab's School Selection

Jameco's nine most popular component Grab Bags (highlighted on this page) all individually bagged. Includes: ceramic and electrolytic capacitors, diodes, transistors, potentiometers, switches, LEDs, 1/4W resistors, spacers and standoffs. North Dakota Engineer, Loren Schwab, recommended this selection of products as a standard item. All



components are individually bagged as shown in photo. He also recommended a 20 drawer component cabinet with labels (81701 photo above) for storage.

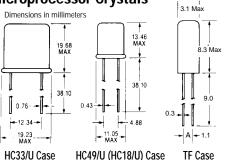
ı	Part No.	Product No.	Description	Wt. (lbs.) 1	10
	163213	GB197	Schwab's School Selection	3.3 \$39.95	\$34.95
	81701	CAB20	20 drawer component cabinet	4.7 15.49	13.95





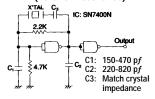
Microprocessor Crystals and Oscillators 24

Microprocessor Crystals



- Frequency calibration tolerance: ± 50ppm @ 25°C
- Operating temperature: -10°C to +60°C
- Drive level: 4.0 mW maximum
- Frequency stability tolerance: ±50 ppm from -10°C to +60°C
- Shunt capacitance: 7pf maximum

Application Reference (4~14MHz) (Parallel Resonance)



HC33/U CASE

Part	Product					Pr	icing		
Number	Number	Frequency (MHz)	Impedance	Microprocessor	1	10	100	1000	
14349	CY1★	1.0	13p <i>f</i>	MC6800/6808/6809E/6500 series	\$4.95	\$4.49	\$3.95	\$3.49	
14357	14357 CY1.84 1.8432 Series MC14411/CDP1802/CDP1804 1.09 .99 .89 .69								
	HC40/II (HC40/II) CASE								

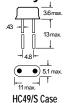
			H	IC49/U (HC18/U) CASE				
102613	CY1.843	1.8432	18p <i>f</i>	MC14411/MC6802	\$.99	\$.79	\$.59	\$.49
102621	CY2.0	2.0	Series	2650/F-8	1.49	1.25	.99	.75
101274	CY2.457	2.4576	32p <i>f</i>	CDP1702/1802C/1804/1804C	.89	.79	.69	.59
14525	CY3.27	3.2768	18p <i>f</i>	IM6100C/CDP1802/CDP1804	.89	.79	.69	.59
14533	CY3.57★	3.579545	18p <i>f</i>	MC6801,2,3/MM5369	.89	.79	.69	.59
14568	CY3.68	3.6864	18p <i>f</i>	8748/8035-8	.89	.79	.69	.59
14592	CY4★	4.0	20p <i>f</i>	MCS-40/MC6802,8,9/CDP1802	.89	.79	.69	.59
14621	CY4.91	4.9152	Series	CDP1802C/1804/1804C	.89	.79	.69	.59
14664	CY5.06	5.0688	Series	COM5016/5016T/5031	.45	.35	.25	.19
14681	CY6	6.0	18p <i>f</i>	MCS-48/IM8048	.89	.79	.69	.59
14699	CY6.14	6.144	30p <i>f</i>	MCS-85/8085	.89	.79	.69	.59
14710	CY7.37	7.3728	30p <i>f</i>	8051/8031	.89	.79	.69	.59
14728	CY8★	8.0	Series	IM6100A/MC68B09	.79	.69	.59	.49
14381	CY10★	10.0	Series	MCS-85/8085A-2	.79	.69	.59	.49
120061	CY11.05	11.0592	Series	General purpose	.89	.79	.69	.59
14402	CY12	12.0	Series	MCS-86/8086/8284/8202	.89	.79	.69	.59
14437	CY14.31	14.31818	Series	8080/8224/general purpose	.59	.49	.39	.29
14453	CY16	16.0	Series	8080/8224/general purpose	.89	.79	.69	.49
14517	CY20	20.0	Series	MCS-80/8080A/8224	.79	.69	.59	.39

TF CASE

14584 CY32.76 32.768kHz 10.5pf Tuning fork \$.89 | \$.79 \$.69 \$.59

Low Profile Microprocessor Crystals

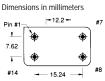
- Frequency range: 3.5 to 70.0MHz
- Operating temp.: -10°C to +60°C
- · Drive level: 0.5mW (fundamental frequency)
- · Aging: ±5ppm/year maximum
- · Frequency stability tolerance: ±50ppm

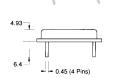


HC49/S CASE (Low Profile)

Part	Product	Frequency		Max.			Pr	icing	
Number	Number	(MHz)	Impedance	Resist.	Microprocessor	1	10	100	1000
137816	CY3.57LP	3.579545	17p <i>f</i>	150Ω	MC6801, 2, 3 / MM5369	\$1.05	\$.85	\$.75	\$.65
137832	CY4LP	4.000	17p <i>f</i>	120Ω	MCS-40 / MC6802, 8 ,9 / CDP1802	1.05	.85	.75	.65
137859	CY8LP	8.000	Series	60Ω	IM6100A / MC68B09	1.05	.85	.75	.65
137875	CY11.05LP	11.0592	Series	50Ω	General purpose	1.05	.85	.75	.65
137891	CY16LP	16.000	Series	40Ω	8080 / 8224 / general purpose	1.05	.85	.75	.65

TTL Crystal Clock Oscillators (full can)





Specifications

- Input voltage: +5VDC, ±0.5VDC
- OSC series oscillators fit into a standard 14-pin DIP socket PN 37209 (pg 59)
- Frequency stability ±100ppm
 Operating temperature: 0°C to 70°C

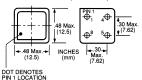
Pin #	Function
1*	N/C
7	GND
8	Output
14	+5VDC

Output Waveforms	
TTL ' # #	Socket
VOH "1" level 2.4V DC	
1.4V DC	200
VOL "O" level	133006
T SYM = TH × 100(%)	

Part No.	Product No.	Frequency (MHz)	Input Current	Rise Fall time	Max Input Curr.	Output Curr.	1	10	100	1000
27861	OSC1	1.0	45mA	15ns	7mA	-1mA	\$3.49	\$2.95	\$2.59	\$2.25
27879	OSC1.84	1.8432	45mA	15ns	7mA	-1mA	1.99	1.79	1.49	1.29
27924	OSC2	2.0	30mA	15ns	7mA	-1mA	2.29	2.09	1.95	1.75
27967	OSC4	4.0	50mA	10ns	7mA	-1mA	1.89	1.69	1.39	1.19
27991	OSC8	8.0	30mA	15ns	15mA	-3mA	1.29	1.09	.89	.69
27887	OSC10	10.0	20mA	10ns	15mA	-3mA	1.29	1.09	.89	.69
144207	OSC11.05	11.059	30mA	10ns	50mA	-3mA	1.29	1.09	.89	.69
27895	OSC12	12.0	50mA	10ns	15mA	-3mA	1.29	1.09	.89	.69
108652	OSC14.31	14.31818	50mA	10ns	15mA	-3mA	1.29	1.09	.79	.59
27908	OSC16	16.0	50mA	10ns	15mA	-3mA	1.29	1.09	.89	.69
27932	OSC20	20.0	20mA	10ns	17mA	-3mA	1.29	1.09	.89	.69
76814	OSC25	25.0	15mA	7ns	18mA	-3mA	1.29	1.09	.89	.69
27941	OSC32	32.0	15mA	7ns	18mA	-4mA	1.29	1.09	.89	.69
76822	OSC33	33.0	15mA	6ns	18mA	-4mA	1.89	1.69	1.39	1.19
153226	OSC40	40.0	15mA	6ns	18mA	-4mA	1.29	1.19	.99	.69
76831	OSC50	50.0	25mA	6ns	25mA	-4mA	1.29	1.19	.99	.79
77489	OSC80	80.0	80mA	3ns	25mA	-4mA	1.89	1.69	1.39	1.19
76857	OSC100	100.0	90mA	3ns	25mA	-4mA	2.49	2.25	1.95	1.75

Part No. D	Description	1	10	100	1000
133006 1	14-pin full can oscillator socket, low profile soldertail	\$.59	\$.45	\$.39	\$.35

TTL Crystal Clock Oscillators (half can)



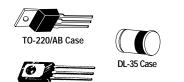
Pin#	Function
1	N/C
4	GND
5	Output
8	+5VDC
-	22 Max. † (5.8) -22 Max. + (5.8) (5.8)

→||**→**.02

- OSCH series oscillators fit into a standard 8-pin DIP socket P/N 51625 (pg 59)
- Input voltage: +5VDC, ±0.5VDC Frequency stability: ±100ppm Operating temperature: 0°C to 70°C

Part	Product	Frequency	Input		Max Input	Output		Pric	ing	
Number	Number	(MHz)	Current	Rise Fall time	Current	Current	1	10	100	1000
102779	OSC1H OSC10H OSC50H	1.0 10.0 50.0	20mA 30mA 20mA	6ns 6ns 6ns	30mA 45mA 30mA	-0.4mA -0.4mA -0.4mA	\$2.75 1.95 1.69	\$2.49 1.75 1.45	\$2.25 1.49 1.19	\$1.95 1.25 1.09

Any Diode may be supplied in ammo-style tape by special order – 1000 piece minimum



TO-126 Case

DO-7/35/41 Case

151247

* Prepackaged: please order in increments of 10, 100 or 1000 # Taped-ammo style: please order in increments of 1000

	Zener Diodes												
Part No.	Prod. No.	NTE/ECG	Case	[Description	1	10	100	1000				
36089	1N4732	5096	DO-41	4.7V	@53mA 1 W	/ *	\$.09	\$.08	\$.06				
36290	1N751	5010A	DO-35	5.1V	@ 20mA .5 W	/ *	.09	.08	.06				
36097	1N4733★	135A	DO-41	5.1V	@49mA 1 W	/ *	.09	.08	.06				
36118	1N4734	136A	DO-41	5.6V	@45mA 1 W	/ *	.09	.08	.06				
36126	1N4735★	137A	DO-41	6.2V	@41mA 1 W	/ *	.09	.08	.06				
36169	1N4742★	142A	DO-41	12.0V	@21mA 1 W	/ *	.09	.08	.06				
36185	1N4744★	145A	DO-41	15.0V	@17mA 1 W	/ *	.09	.08	.06				
183450	1N4750A	146A	DO-41	27.0V	@ 9.5mA1 W	/ *	.09	.08	.06				

VISHAY		Ze	ner Diodes				
Part No.	Product No.	Case	Description	1	10	100	1000
179004	1N5225B-VSHY	DO-35	3.0V @ 20mA	*	\$.12	\$.11	\$.10
179012	1N5226B-VSHY	DO-35	3.3V @ 20mA	*	.08	.07	.06
179021	1N5229B-VSHY	DO-35	4.3V @ 20mA	*	.08	.07	.06
179039	1N5230B-VSHY	DO-35	4.7V @ 20mA	*	.08	.07	.06
179047	1N5231B-VSHY	DO-35	5.1V @ 20mA	*	.08	.07	.06
179055	1N5232B-VSHY	DO-35	5.6V @ 20mA	*	.07	.06	.05
179063	1N5234B-VSHY	DO-35	6.2V @ 20mA	*	.07	.06	.05
179071	1N5239B-VSHY	DO-35	9.1V @ 20mA	*	.07	.06	.05
179080	1N5241B-VSHY	DO-35	11V @ 20mA	*	.07	.06	.05
179098	1N5242B-VSHY	DO-35	12V @ 20mA	*	.07	.06	.05
179101	1N5245B-VSHY	DO-35	15V @ 8.5mA	*	.07	.06	.05
179119	1N5246B-VSHY	DO-35	16V @ 7.8mA	*	.07	.06	.05
179127	1N5248B-VSHY	DO-35	18V @ 7.0mA	*	.07	.06	.05
179135	1N5250B-VSHY	DO-35	20V @ 6.2mA	*	.07	.06	.05
179143	1N5253B-VSHY	DO-35	25V @ 5.0mA	*	.07	.06	.05
179151	1N5257B-VSHY	DO-35	33V @ 3.8mA	*	.07	.06	.05
179160	1N5258B-VSHY	DO-35	36V @ 3.4mA	*	.07	.06	.05
179178	1N5260B-VSHY	DO-35	43V @ 3.0mA	*	.07	.06	.05
179186	1N5262B-VSHY	DO-35	51V @ 2.5mA	*	.07	.06	.05
179194	1N5267B-VSHY	DO-35	75V @ 1.7mA	*	.07	.06	.05

VISHAY	Zener Diodes										
Part No.	Product No.	Case	Description	1	10	100	1000				
178765	1N4730A-VSHY	DO-41	3.9V @ 64mA	*	\$.13	\$.11	\$.09				
178773	1N4732A-VSHY	DO-41	4.7V @ 53mA	*	.13	.11	.09				
178781	1N4733A-VSHY	DO-41	5.1V @ 49mA	*	.13	.11	.09				
178790	1N4734A-VSHY	DO-41	5.6V @ 45mA	*	.13	.11	.09				
178802	1N4735A-VSHY	DO-41	6.2V @ 41mA	*	.13	.11	.09				
178811	1N4737A-VSHY	DO-41	7.5V @ 34mA	*	.13	.11	.09				
178829	1N4738A-VSHY	DO-41	8.2V @ 31mA	*	.13	.11	.09				

VISHAY		Ze	ner Diodes				
Part No.	Product No.	Case	Description	1	10	100	1000
178837	1N4739A-VSHY	DO-41	9.1V @ 28mA	*	\$.13	\$.11	\$.09
178845	1N4740A-VSHY	DO-41	10V @ 25mA	*	.13	.11	.09
178853	1N4742A-VSHY	DO-41	12V @ 21mA	*	.13	.11	.09
178861	1N4744A-VSHY	DO-41	15V @ 17mA	*	.13	.11	.09
178870	1N4746A-VSHY	DO-41	18V @ 14mA	*	.13	.11	.09
178888	1N4747A-VSHY	DO-41	20V @12.5mA	*	.13	.11	.09
178896	1N4748A-VSHY	DO-41	22V @11.5mA	*	.13	.11	.09
178909	1N4749A-VSHY	DO-41	24V @10.5mA	*	.13	.11	.09
178917	1N4750A-VSHY	DO-41	27V @ 9.5mA	*	.13	.11	.09
178925	1N4751A-VSHY	DO-41	30V @ 8.5mA	*	.13	.11	.09
178933	1N4752A-VSHY	DO-41	33V @ 7.5mA	*	.13	.11	.09
178941	1N4753A-VSHY	DO-41	36V @ 7.0mA	*	.13	.11	.09
178950	1N4755A-VSHY	DO-41	43V @ 6.0mA	*	.13	.11	.09
178968	1N4756A-VSHY	DO-41	47V @ 5.5mA	*	.13	.11	.09
178976	1N4758A-VSHY	DO-41	56V @ 4.5mA	*	.13	.11	.09
178984	1N4759A-VSHY	DO-41	62V @ 4.0mA	*	.13	.11	.09
178992	1N4761A-VSHY	DO-41	75V @ 3.3mA	*	.13	.11	.09

	Switching Diodes												
Part No.	Prod. No.	NTE/ECG	Case	Description	1	10	100	1000					
35967	1N3600★	519	DO-35	50PRV @100μa 200mA	*	\$.12	\$.10	\$.08					
36038	1N4148★	519	DO-35	75 PRV @ 50μa 10mA	*	.04	.03	.02					
151247	1N4148T	519	DO-35	75 PRV @ 50μa 10mA	#	#	#	.02					
36311	1N914★	519	DO-35	75 PRV @ 5μa 10mA	*	.04	.03	.02					

VISHAY		Swit					
Part No.	Product No.	Case	Description	1	10	100	1000
179207	1N914-VSHY	DO-35	100PRV @ 25mA	*	\$.06	\$.05	\$.04
179215	1N4148-VSHY	DO-35	100PRV @ 25mA	*	.14	.13	.11

•			(Genera	l Purpose	Diod	e			
	Part No P	rod No	NTF/FCG	Case De	scription		1	10	100	1000

80 PRV 200mA

\$.59 | \$.55 | \$.49

VISHAY	(Genera	I Purpose Diode	es			
Part No.	Product No.	Case	Description	1	10	100	1000
179231	BAV21-VSHY	DO-35	250PRV @ 200mA	*	\$.08	\$.07	\$.06
179223	BAV20-VSHY	DO-35	200PRV @ 200mA	*	.08	.07	.06

	Surface Mount Diodes								
Part No.	Prod. No.	Description	1	100	1000				
94908	1N4148SM	_	DL- 35	75 PRV @ 50μa 10mA (1N 914)	*	\$.05	\$.035		

				Triacs				
Part No.	Prod. No.	NTE/ECG	Case	Description	1	10	100	1000
140425	2N6071A	5603	TO-126	200 PRV 4A	\$.69	\$.59	\$.49	\$.45
31819	SC146B	5633	TO-220	200 PRV10A (2N6342)	1.49	1.29	1.09	.89
31827	SC146M	5637	TO-220	600 PRV10A (2N6344)	1.69	1.49	1.29	1.09
139336	Q4015L5	56020	TO-220AB	400 PRV 15A	1.69	1.49	1.25	1.09



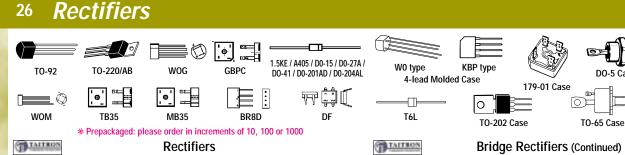


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DO-7

Rectifiers



TAILE	275		Rectifi	ers					
Part No.	Product No.	Case	Descr	iptio	n	1	10	100	1000
177615	1N4001	DO-41	50PIV	@	1A	*	\$.05	\$.04	\$.03
177623	1N4002	DO-41	100PIV	@	1A	*	.05	.04	.03
177631	1N4003	DO-41	200PIV	@	1A	*	.05	.04	.03
177640	1N4004	DO-41	400PIV	@	1A	*	.05	.04	.03
177658	1N4005	DO-41	600PIV	@	1A	*	.05	.04	.03
177666	1N4006	DO-41	800PIV	@	1A	*	.05	.04	.03
177674	1N4007	DO-41	1000PIV	@	1A	*	.05	.04	.03
177682	1N5400	DO-201AD	50PIV	@	3A	*	.16	.15	.13
177691	1N5401	DO-201AD	100PIV	@	3A	*	.16	.15	.13
177703	1N5402	DO-201AD	200PIV	@	3A	*	.16	.15	.13
177711	1N5404	DO-201AD	400PIV	@	3A	*	.16	.15	.13
177720	1N5406	DO-201AD	600PIV	@	3A	*	.16	.15	.13
177738	1N5407	DO-201AD	800PIV	@	3A	*	.16	.15	.13
177746	1N5408	DO-201AD	1000PIV	@	3A	*	.16	.15	.13
177754	T6A05L	T6L	50PIV	@	6A	.49	.44	.39	.36
177762	T6A10L	T6L	100PIV	@	6A	.49	.44	.39	.36
177771	T6A20L	T6L	200PIV	@	6A	.49	.44	.39	.36
177789	T6A40L	T6L	400PIV	@	6A	.49	.44	.39	.36
177797	T6A60L	T6L	600PIV	@	6A	.49	.44	.39	.36
177800	T6A80L	T6L	800PIV	@	6A	.49	.44	.39	.36
177818	T6A100L	T6L	1000PIV	@	6A	.49	.44	.39	.36

TAITE	28	В	Bridge Re	ecti	fiers				
Part No.	Product No.	Case	Descr	iptio	n	1	10	100	1000
178124	W005M	WOM	50PIV	@	1.5A	\$.42	\$.38	\$.34	\$.31
178132	W01M	WOM	100PIV	@	1.5A	.42	.38	.34	.31
178141	W02M	WOM	200PIV	@	1.5A	.42	.38	.34	.31
178159	W04M	WOM	400PIV	@	1.5A	.42	.38	.34	.31
178167	W06M	WOM	600PIV	@	1.5A	.42	.38	.34	.31
178175	W80W	WOM	800PIV	@	1.5A	.42	.38	.34	.31
178183	BR805D	BR8D	50PIV	@	2A	.85	.77	.69	.62
178191	BR81D	BR8D	100PIV	@	2A	.85	.77	.69	.62
178204	BR82D	BR8D	200PIV	@	2A	.85	.77	.69	.62
178212	BR84D	BR8D	400PIV	@	2A	.85	.77	.69	.62
178221	BR86D	BR8D	600PIV	@	2A	.85	.77	.69	.62
178239	BR88D	BR8D	800PIV	@	2A	.85	.77	.69	.62
178247	BR810D	BR8D	1000PIV	@	2A	.85	.77	.69	.62
178255	MB2505	MB35	50PIV	@	25A	4.19	3.77	3.39	3.05
178263	MB251	MB35	100PIV	@	25A	4.19	3.77	3.39	3.05
178271	MB252	MB35	200PIV	@	25A	4.19	3.77	3.39	3.05
178280	MB254	MB35	400PIV	@	25A	4.19	3.77	3.39	3.05
178298	MB256	MB35	600PIV	@	25A	4.19	3.77	3.39	3.05
178301	MB258	MB35	800PIV	@	25A	4.19	3.77	3.39	3.05
178319	MB2510	MB35	1000PIV	@	25A	4.19	3.77	3.39	3.05
178327	TB251	TB35	100PIV	@	25A	4.19	3.77	3.39	3.05
178335	TB252	TB35	200PIV	@	25A	4.19	3.77	3.39	3.05
178343	TB254	TB35	400PIV	@	25A	4.19	3.77	3.39	3.05
178351	TB256	TB35	600PIV	@	25A	4.19	3.77	3.39	3.05

TAITE	28	Bridge	e Rectific	ers	(Conti	inued)			
Part No.	Product No.	Case	Descr	iptio	n	1	10	100	1000
178360	TB258	TB35	800PIV	@	25A	\$4.19	\$3.77	\$3.39	\$3.05
178378	TB2510	TB35	1000PIV	@	25A	4.19	3.77	3.39	3.05
178386	MB3505	MB35	50PIV	@	35A	4.39	3.95	3.56	3.19
178394	MB351	MB35	100PIV	@	35A	4.39	3.95	3.56	3.19
178407	MB352	MB35	200PIV	@	35A	4.39	3.95	3.56	3.19
178415	MB354	MB35	400PIV	@	35A	4.39	3.95	3.56	3.19
178423	MB356	MB35	600PIV	@	35A	4.39	3.95	3.56	3.19
178431	MB358	MB35	800PIV	@	35A	4.39	3.95	3.56	3.19
178440	TB3505	TB35	50PIV	@	35A	4.39	3.95	3.56	3.19
178458	TB351	TB35	100PIV	@	35A	4.39	3.95	3.56	3.19
178466	TB352	TB35	200PIV	@	35A	4.39	3.95	3.56	3.19
178474	TB354	TB35	400PIV	@	35A	4.39	3.95	3.56	3.19
178482	TB356	TB35	600PIV	@	35A	4.39	3.95	3.56	3.19
178491	TB358	TB35	800PIV	@	35A	4.39	3.95	3.56	3.19
178503	TB3510	TB35	1000PIV	@	35A	4.39	3.95	3.56	3.19

TVILLE	Glass Passivated Bridge Rectifiers									
Part No.	Product No.	Case	Description	1	10	100	1000			
178001	DF005M	DF	50PIV @ 1.0A	\$.49	\$.44	\$.39	\$.36			
178028	DF01M	DF	100PIV @ 1.0A	.49	.44	.39	.36			
178044	DF02M	DF	200PIV @ 1.0A	.49	.44	.39	.36			
178061	DF04M	DF	400PIV @ 1.0A	.49	.44	.39	.36			
178087	DF06M	DF	600PIV @ 1.0A	.53	.48	.43	.39			
178108	DF08M	DF	800PIV @ 1.0A	.53	.48	.43	.39			

Contract Spences	Glass Passivated Bridge Rectifiers									
Part No.	Product No.	Case	Desc	cripti	on	1	10	100	1000	
178010	DF005M-GSI	DF	50PIV	@	1.0A	\$.32	\$.29	\$.26	\$.23	
178036	DF01M-GSI	DF	100PIV	@	1.0A	.32	.29	.26	.23	
178052	DF02M-GSI	DF	200PIV	@	1.0A	.32	.29	.26	.23	
178079	DF04M-GSI	DF	400PIV	@	1.0A	.32	.29	.26	.23	
178095	DF06M-GSI	DF	600PIV	@	1.0A	.35	.32	.28	.26	
178116	DF08M-GSI	DF	800PIV	@	1.0A	.35	.32	.28	.26	
179400	DF10M-GSI	DF	1000PIV	@	1.0A	.35	.32	.28	.26	
179418	W005G-GSI	W0G	50PIV	@	1.5A	.46	.41	.37	.34	
179426	W01G-GSI	W0G	100PIV	@	1.5A	.46	.41	.37	.34	
179434	W02G-GSI	W0G	200PIV	@	1.5A	.46	.41	.37	.34	
179442	W04G-GSI	W0G	400PIV	@	1.5A	.46	.41	.37	.34	
179451	W06G-GSI	W0G	600PIV	@	1.5A	.49	.44	.39	.36	
179469	W08G-GSI	W0G	800PIV	@	1.5A	.49	.44	.39	.36	
179477	GBPC25-01-GSI	GBPC	100PIV	@	25A	2.89	2.59	2.34	2.11	
179485	GBPC25-02-GSI	GBPC	200PIV	@	25A	2.89	2.59	2.34	2.11	
179493	GBPC25-04-GSI	GBPC	400PIV	@	25A	2.89	2.59	2.34	2.11	
179506	GBPC25-06-GSI	GBPC	600PIV	@	25A	2.89	2.59	2.34	2.11	
179514	GBPC25-08-GSI	GBPC	800PIV	@	25A	2.89	2.59	2.34	2.11	
179522	GBPC25-10-GSI	GBPC	1000PIV	@	25A	2.89	2.59	2.34	2.11	

4-Pin DIP Case

TO-92 Case

Rectifiers, Transistors & Voltage Suppressors

TAITEON

Careton Supercrow's

* Prepackaged: please order in increments of 10, 100 or 1000

Full Wave Bridge Rectifiers

		гu	i wave bii	uge Rei	Juners	•			
Part No.	Product No.	NTE/ECG	Case	Description	n	1	10	100	1000
103018	W02G	_	4-lead molded	200 PRV	1 amp	\$.49	\$.45	\$.39	\$.29
102980	W04G	_	4-lead molded	400 PRV	1 amp	.45	.39	.35	.29
102998	W06G	_	4-lead molded	600 PRV	1 amp	.45	.39	.35	.25
103000	DF01M	5332	4-pin DIP	100 PRV	1 amp	.39	.35	.29	.25
103042	DF02M	5332	4-pin DIP	200 PRV	1 amp	.49	.45	.39	.25
102971	DF04M	5332	4-pin DIP	400 PRV	1 amp	.49	.45	.39	.35
103034	DF06M	5332	4-pin DIP	600 PRV	1 amp	.49	.45	.39	.35
145429	KBP02M	_	4-lead molded	200 PRV	1.5 amp	.59	.49	.45	.39
119562	KBP04M	_	4-lead molded	400 PRV	1.5 amp	.59	.49	.45	.29
25574	MDA990-3★	5322	179-01	200 PRV	30 amp	3.95	3.49	2.95	2.49
25591	MDA990-6	5326	179-01	600 PRV	30 amp	4.95	3.95	3.49	2.95
DIVID	GI	ass Pa	assivated L	Jitra Fas	st Rect	ifier	S		

Glass Passivated Ultra Fast Rec	tifiers:
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Part No.	Product No.	Case	Description	1	10	100	1000
177877	UF4001	DO-41	50PIV @ 1.0A	\$.23	\$.21	\$.19	\$.17
177885	UF4002	DO-41	100PIV @ 1.0A	.23	.21	.19	.17
177893	UF4003	DO-41	200PIV @ 1.0A	.23	.21	.19	.17
177906	UF4004	DO-41	400PIV @ 1.0A	.23	.21	.19	.17
177914	UF4005	DO-41	600PIV @ 1.0A	.25	.23	.19	.18
177922	UF4006	DO-41	800PIV @ 1.0A	.25	.23	.19	.18
177931	UF4007	DO-41	1000PIV @ 1.0A	.25	.23	.19	.18

Silicon Rectifiers

Part No.	Prod. No.	NTE/ECG	Case	Descrip	tion	1	10	100	1000
35975	1N4001★	116	DO-41	50 PRV	1 amp	*	\$.04	\$.025	\$.02
76961	1N4002	116	DO-41	100 PRV	1 amp	*	.04	.025	.02
76970	1N4003	116	DO-41	200 PRV	1 amp	*	.04	.025	.02
35991	1N4004★	116	DO-41	400 PRV	1 amp	*	.04	.025	.02
76988	1N4005	116	DO-41	600 PRV	1 amp	*	.04	.025	.02
76996	1N4006	125	DO-41	800 PRV	1 amp	*	.09	.07	.05
36011	1N4007★	125	DO-41	1000 PRV	1 amp	*	.05	.03	.025
77075	1N5400	5800	DO-27A	50 PRV	3 amp	*	.10	.09	.08
36249	1N5401★	5801	DO-27A	100 PRV	3 amp	*	.10	.09	.08
77083	1N5402	5802	DO-27A	200 PRV	3 amp	*	.10	.09	.08
36265	1N5404★	5804	DO-27A	400 PRV	3 amp	*	.10	.09	.08
36273	1N5408★	5809	DO-27A	1000 PRV	3 amp	*	.15	.13	.11

Silicon Controlled Rectifiers (SCR) *Isolated

Part No.	Prod. No.	NTE/ECG	Case	Description		10	100	1000
119802	2N5060	5400	TO-92	25 PRV 0.8A	\$.35	\$.29	\$.25	\$.19
120070	2N5062	5402	TO-92	100 PRV 0.8A	.49	.45	.39	.35
14736	C106B1	5455	TO-202	200 PRV 4A (2N6239)*	.59	.49	.45	.39
14752	C122B	5463	TO-220	200 PRV 8A*	1.25	.99	.75	.65
14761	C122M	5466	TO-220	600 PR V 8A*	1.35	1.15	.99	.89
140417	2N6507	5554	TO-220AB	400 PRV 25A	1.69	1.49	1.29	1.09
14859	C38M	5547	TO-65	600 PRV 35A (2N3899)	5.49	4.49	3.75	2.95

Fast Recovery Rectifiers

Part No.	Product No.	Case	Description	1	10	100	1000
177826	1N4933	A-405	50PIV @ 1.0A	*	\$.09	\$.08	\$.07
177834	1N4934	A-405	100PIV @ 1.0A	*	.09	.08	.07
177842	1N4935	A-405	200PIV @ 1.0A	*	.09	.08	.07
177851	1N4936	A-405	400PIV @ 1.0A	*	.09	.08	.07
177869	1N4937	A-405	600PIV @ 1.0A	*	.09	.08	.07

	Soliotary Burrier Resultiers											
Part No.	Product No.	Case	Description	1	10	100	1000					
177949	1N5817	DO-204AL	20PIV @ 1A	\$.24	\$.22	\$.19	\$.18					
177957	1N5818	DO-204AL	30PIV @ 1A	.24	.22	.19	.18					
177965	1N5819	DO-204AL	40PIV @ 1A	.24	.22	.19	.18					
177973	1N5820	DO-201AD	20PIV @ 3A	.39	.35	.32	.28					
177981	1N5821	DO-201AD	30PIV @ 3A	.39	.35	.32	.28					
177990	1N5822	DO-201AD	40PIV @ 3A	.39	.35	.32	.28					

Stud Rectifier

Part No.	Prod. No.	NTE/ECG	Case	Description	1	10	100	1000
35924	1N1188	5990	DO-5	400 PRV 35 amp	\$3.49	\$3.25	\$2.49	\$2.25

Bidirectional Transient Voltage Suppressor

Part No.	Prod. No.	NTE/ECG	Case	Description	1	10	100	1000
103106	1.5KE15CA	4921	1.5KE	15V@1mA 1500W	\$.65	\$.55	\$.45	\$.39

Transient Voltage Suppressors

CA: Bidirectional A: Unidirectional

	DECEMBER 110			Stand off		Prici	na	
Part No.	Product No.	Case	Min Brkdwn Vltg. (Vbr)	Stand-off Voltage	1	10	100	1000
179531	1.5KE100CA-GSI	1.5KE	95	85.5	\$.79	\$.71	\$.64	\$.58
179549	1.5KE16A-GSI	1.5KE	15.2	13.6	.59	.53	.48	.43
179557	1.5KE18A-GSI	1.5KE	17.1	15.3	.59	.53	.48	.43
179565	1.5KE22A-GSI	1.5KE	20.9	18.8	.59	.53	.48	.43
179573	1.5KE250CA-GSI	1.5KE	237	214	.89	.79	.72	.65
179581	1.5KE30AGSI	1.5KE	28.5	25.6	.56	.49	.45	.41
179590	1.5KE33A-GSI	1.5KE	31.4	28.2	.59	.53	.48	.43
179602	1.5KE350A-GSI	1.5KE	333	300	.69	.62	.56	.49
179611	1.5KE39CA-GSI	1.5KE	37.1	33.3	.59	.53	.48	.43
179629	1.5KE43CA-GSI	1.5KE	40.9	36.8	.64	.58	.52	.47
179637	1.5KE51A-GSI	1.5KE	48.5	43.6	.59	.53	.48	.43
179645	1.5KE51CA-GSI	1.5KE	48.5	43.6	.79	.71	.64	.58
179653	1.5KE6.8A-GSI	1.5KE	6.45	5.8	.59	.53	.48	.43
179661	1.5KE6.8CA-GSI	1.5KE	6.45	5.8	.79	.71	.64	.58
179670	1.5KE68CA-GSI	1.5KE	64.6	58.1	.79	.71	.64	.58
179688	P6KE12A-GSI	DO-15	11.4	10.2	.33	.29	.27	.24
179696	P6KE13A-GSI	DO-15	12.4	11.1	.33	.29	.27	.24
179709	P6KE15A-GSI	DO-15	14.3	12.8	.33	.29	.27	.24
179717	P6KE15CA-GSI	DO-15	14.3	12.8	.39	.35	.32	.28
179725	P6KE16A-GSI	DO-15	15.2	13.6	.33	.30	.27	.24
179733	P6KE16CA-GSI	DO-15	15.2	13.3	.39	.35	.32	.28
179741	P6KE18A-GSI	DO-15	17.1	15.3	.33	.29	.27	.24
185463	P6KE180A-GSI	DO-15	171	154	.33	.29	.27	.24
179750	P6KE200A-GSI	DO-15	190	171	.33	.29	.27	.24
179768	P6KE200CA-GSI	DO-15	190	171	.39	.35	.32	.28
179776	P6KE20A-GSI	DO-15	19	17.1	.33	.29	.27	.24
179784	P6KE27A-GSI	DO-15	25.7	23.1	.33	.29	.27	.24
179792	P6KE33CA-GSI	DO-15	31.4	28.2	.39	.35	.32	.28
179805	P6KE39A-GSI	DO-15	37.1	33.3	.33	.30	.27	.24
179813	P6KE43CA-GSI	DO-15	40.9	36.8	.39	.35	.32	.28
179821	P6KE6.8A-GSI	DO-15	6.45	5.8	.33	.30	.27	.24
179830	P6KE6.8CA-GSI	DO-15	6.45	5.8	.39	.35	.32	.28
179848	P6KE82A-GSI	DO-15	77.9	70.1	.33	.29	.27	.24
179856	P6KE9.1A-GSI	DO-15	8.65	7.78	.33	.29	.27	.24

N-Channel Power Mosfet

			Drain Source	Min. On-state	Pricing			
Part No.	Product No.	Case	Brkdwn VItg.	DS Current	1	10	100	1000
178669	2N7000-FSC	TO-92	60	0.2	\$.23	\$.21	\$.19	\$.17







We carry major manufacturers – call for pricing on quantities over 5000.

Any Transistor may be supplied in ammo style tape by special order – 1000 piece min.



National TEXAS
Semiconductor INSTRUMENTS



















TO-237 Case

* Prepackaged: please order in incr	rements of 10, 100 or 1000
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Part	Product				Min. hfe	Typ. or	NTE/		Pricing		
Number	Number	Case	Description	V_{ceo}	@ I _C	Max F _t (MHz)	ECG NO.	1	10	100	1000
26462	MPSA06	TO-92	NPN medium power	30	50 @ 10mA	125	287	*	\$.13	\$.11	\$.09
26489	MPSA13	TO-92	NPN power darlington	30	5K @ 10mA	125	46	*	.11	.09	.07
33021	TIP29A	TO-220	NPN power transistor	60	15 @ 1A	0.5	291	.49	.39	.35	.29
181825	TIP29C	TO-220	NPN epitaxial silicon transistor	100	15 @ 1A	3.0	_	.55	.49	.45	.39
33030	TIP30A	TO-220	PNP power transistor	60	15 @ 1A	0.5	292	.49	.39	.35	.29
33048	TIP31A★	TO-220	NPN power transistor	60	10 @ 3A	0.5	291	.49	.39	.35	.29
33064	TIP32A★	TO-220	PNP power transistor	60	10 @ 3A	0.5	292	.49	.39	.35	.29
181841	TIP32C	TO-220	PNP epitaxial silicon transistor	100	10 @ 3A	3.0	_	.55	.49	.45	.39
33081	TIP41A★	TO-220	NPN power transistor	60	15 @ 3A	1	331	.59	.49	.45	.39
33101	TIP42A★	TO-220	PNP power transistor	60	15 @ 3A	1	332	.59	.49	.45	.39
139580		TO-220	PNP epitaxial silicon transistor	100	15 @ 3A	3.0	_	.69	.59	.49	.45
	BPW77	TO-18	NPN photo transistor w/ lens	70	N/A	0.11	_	2.19	1.95	1.75	1.55
32977	TIP102★	TO-220	NPN power darlington	100	1K @ 3A	_	2343	.65	.55	.49	.45
32985	TIP106	TO-220	PNP power darlington	80	1K @ 3A	_	2344	.65	.55	.45	.39
32993	TIP120★	TO-220	NPN power darlington	60	1K @ 3A	_	261	.65	.55	.45	.39
120416		TO-220	NPN power darlington	100	1K @ 3A	_	261	.59	.49	.45	.39
33013	TIP125★	TO-220	PNP power darlington	60	1K @ 3A	_	262	.59	.49	.45	.39
38228	2N2219A	TO-39	NPN general purpose	40	100 @ 150mA	300	128	.59	.49	.45	.39
28628	PN2222★	TO-92	NPN general purpose	30	100 @ 150mA	250	123AP	*	.12	.10	.08
38236	2N2222A★	TO-18	NPN general purpose	40	100 @ 150mA	250	123A	.39	.35	.29	.25
26446	MPQ2222	14-pin DIP	NPN gen. purp. small signal/quad (F404462)	40	100 @ 150mA	200	2321	2.95	2.65	2.39	2.15
28644	PN2907★	TO-92	PNP general purpose	40	100 @ 150mA	200	159	*	.10	.08	.06
38279	2N2907A★	TO-18	PNP general purpose	60	100 @ 150mA	200	129P	.29	.25	.22	.17
26454	MPQ2907	14-pin DIP	PNP gen. purp. small signal/quad	40	100 @ 150mA	200	2322	1.95	1.75	1.55	1.35
25831	MJE2955T★	TO-220	PNP power transistor	60	20 @ 4A	2	332	.65	.55	.49	.39
38295	2N3053	TO-39	NPN general purpose	40	25 @ 150mA	100	129	.55	.45	.39	.35
25857	MJE3055T★	TO-220	NPN power transistor	60	20 @ 4A	2	331	.65	.55	.49	.45
38308	2N3055★	TO-3	NPN power bipolar, epitaxial base	60	15 @ 10A	0.01	130	.75	.65	.59	.45
38324	2N3772★	TO-3	NPN power bipolar, epitaxial base	40	15 @ 4A	0.05	181	1.49	1.35	1.25	1.09
140151	2N3773	TO-3	NPN power audio	140	15 @ 8A		284	1.49	1.35	1.25	1.09
38359	2N3904*	TO-92	NPN general purpose	40	100 @ 10mA	300	123AP	*	.06	.05	.04
38375	2N3906★	TO-92	PNP general purpose	40	100 @ 10mA	250	159	*	.06	.05	.04
38421	2N4401*	TO-92	NPN general purpose	40	100 @ 150mA	250	123AP	*	.07	.06	.05
38447	2N4403★	TO-92	PNP general purpose	40	100 @ 150mA	200	159	*	.07	.06	.05
	2N5109	TO-39	NPN RF broad band transistor	20	40 @ 50mA	1200	278	2.19	1.95	1.75	1.55
38480	PN5179	TO-92	NPN high frequency transistor	15	25 @ 3mA	2000	229	.65	.55	.49	.45
	2N5179	TO-72	NPN low noise UHF transistor	12	25 @ 3mA	900	316	1.09	.99	.89	.79
140134	2N6725	TO-237	NPN darlington	50	25000 @ 200mA	100	48	.45	.39	.35	.29

FAIRCHILD	Small Signal Gene	ral Purpose Tra	ansistors
BEMICCADUSTUR	Timan Tiginal Tollio		

Part No.	Product No.	Case	Desc.	Vceo	Min. hfe @lc (mA)	1	10	100	1000
178597	2N3904-FSC	TO-92	NPN	40	100 @ 10	*	\$.09	\$.08	\$.07
178618	2N3906-FSC	TO-92	PNP	-40	100 @ 10	*	.09	.08	.07
178634	2N4401-FSC	TO-92	NPN	40	100 @ 150	*	.17	.15	.14
178651	2N4403-FSC	TO-92	PNP	-40	100 @ 150	*	.17	.15	.14
178677	KSP05-FSC	TO-92	NPN	60	50 @ 100	*	.14	.12	.11
178693	KSP55-FSC	TO-92	PNP	-60	50 @ 100	*	.22	.19	.18
178706	KSP06-FSC	TO-92	NPN	80	50 @ 100	*	.14	.12	.11
178714	KSP56-FSC	TO-92	PNP	-80	50 @ 100	*	.14	.12	.11
178722	KSP2222A-FSC	TO-92	NPN	40	100 @ 150	*	.16	.15	.13
178731	KSP2907A-FSC	TO-92	PNP	-60	100 @ 150	*	.16	.15	.13

I	TAITEON	Sma	all Signal	Low	Noise	Trans	sistors	

Part No.	Product No.	Case	Desc.	Vceo	Min. hfe@lc	1	10	100	1000
178562	2N5088	TO-92	NPN	30	300 @ 0.1mA	\$.26	\$.23	\$.21	\$.19

REWICKWINGS	OH								
Part No.	Product No.	Case	Desc.	Vceo	Min. hfe@lc (mA)	1	10	100	1000
178685	KSP10-FSC	TO-92	NPN	25	60 @ 4	*	\$.17	\$.15	\$.14

Small Signal General Purpose Transistors

_		_		,		•				
Part	No.	Product No.	Case	Desc.	Vceo	Min. hfe@lc (mA) 1	10	100	1000
178	511	PN2222A	TO-92	NPN	40	100 @ 150	*	\$.16	\$.15	\$.13
178	520	PN2907A	TO-92	PNP	-60	100 @ 150	*	.16	.15	.13
178	538	MPSA06	TO-92	NPN	80	100 @ 100	*	.14	.12	.11
178	589	2N3904	TO-92	NPN	40	100 @ 10	*	.09	.08	.07
178	600	2N3906	TO-92	PNP	-40	100 @ 10	*	.09	.08	.07
178	626	2N4401	TO-92	NPN	40	100 @ 150	*	.17	.15	.14
178	642	2N4403	TO-92	PNP	-40	100 @ 150	*	.17	.15	.14

TAITHON **Small Signal High Voltage Transistors**

Part No.	Product No.	Case	Desc.	Vceo	Min. hfe@lc (mA)	1	10	100	1000
178546	MPSA42	TO-92	NPN	300	40 @ 10	\$.25	\$.23	\$.20	\$.18
178554	MPSA92	TO-92	PNP	-300	40 @ 10	.25	.23	.20	.18
178571	2N5551	TO-92	NPN	160	80 @ 10	.25	.23	.20	.18

HLD	Small Signal High Voltage Transistors	
	Sinan Signal High Voltage Hansistors	
USTUR		

Pai	rt No.	Product No.	Case	Desc.	Vceo	Min. hfe@lc (mA)	1	10	100	1000
17	78749	KSP42-FSC	TO-92	NPN	300	40 @ 10	\$.25	\$.23	\$.19	\$.18
17	78757	KSP92-FSC	TO-92	PNP	-300	40 @ 10	.25	.23	.19	.18





Transistors and Thermoelectric Cooler Chips

Surface Mount Technology Transistors (SMT)

Part	Product			Min. hfe	Typ. or	NTE/	Pricing				
Number	Number	Case	Description	v_{ceo}	@ I _C	Max F _t (MHz)	ECG NO.	1	100	1000	3000
94941	PN2222SM	SOT-23	NPN general purpose	30	100 @ 150mA	250	123AP	*	\$.10	\$.07	\$.05
94959	PN2907SM	SOT-23	PNP general purpose	40	100 @ 150mA	200	159	*	.10	.07	.05
94967	2N3904SM	SOT-23	NPN general purpose	40	100 @ 10mA	300	123AP	*	.10	.07	.05
94975	2N3906SM	SOT-23	PNP general purpose	40	100 @ 10mA	250	159	*	.10	.07	.05

J-FET Transistors

* Prepackaged: please order in increments of 100, 1000 or 3000

F	art	Product			BV _{GS} (V)min	I _{DSS} (max)	VP (max)	NTE/		Pric	ing	
N	lumber	Number	Case	Description	@ IGuA	(mA) @ V _{DS}	@ V _{DS}	ECG No.	1	10	100	1000
2	6403	MPF102★	TO-92	JFET (N Channel) RF, VHF, UHF, amp	25 @ 1	20 @ 15	4 @ 0.5	451	\$.39	\$.35	\$.29	\$.25
1	40142	J176	TO-92	JFET (P Channel)	30 @ 1	2 @ 25	4 @ -15		.39	.35	.29	.25
3	8341	2N3823	TO-72	JFET (N Channel) VHF, amp	30 @ 1	20 @ 15	8 @ 0.5	452	1.09	.99	.89	.79
3	8527	2N5951	TO-92	JFET (N Channel) RF, VHF, UHF, amp	30 @ 1	13 @ 15	5 @ 100		.99	.89	.79	.69
1	19423	2N7000	TO-92	FET TMOS (N Channel)	_	1 @ 48	_	491	.35	.29	.25	.22

Darlington Power Transistors

				•						
	Part No.	Product No.	Case	Desc.	Vceo	Min. hfe@lc	1	10	100	1000
	179240	TIP102-SAM	TO-220	NPN	100	1K @ 3A	\$.69	\$.62	\$.56	\$.49
	179258	TIP107-SAM	TO-220	PNP	-100	1K @ 3A	.69	.62	.56	.49
	179266	TIP110-SAM	TO-220	NPN	60	500 @ 2A	.58	.52	.47	.42
	179274	TIP112-SAM	TO-220	NPN	100	500 @ 2A	.62	.56	.49	.45
	179282	TIP117-SAM	TO-220	PNP	-100	500 @ 2A	.62	.56	.49	.45
	179291	TIP120-SAM	TO-220	NPN	60	1K @ 3A	.58	.52	.47	.42
	179303	TIP122-SAM	TO-220	NPN	100	1K @ 3A	.62	.56	.49	.45
	179311	TIP125-SAM	TO-220	PNP	-60	1K @ 3A	.58	.52	.47	.42
l	179320	TIP127-SAM	TO-220	PNP	-100	1K @ 3A	.62	.56	.49	.45

Power Transistors SAMSUNG

Part No.	Product No.	Case	Desc.	Vceo	Min. hfe@lc	1	10	100	1000
179338	TIP29C-SAM	TO-220	NPN	100	15 @ 1A	\$.58	\$.52	\$.47	\$.42
179346	TIP30C-SAM	TO-220	PNP	-100	15 @ 1A	.58	.52	.47	.42
179354	TIP31C-SAM	TO-220	NPN	100	10 @ 3A	.58	.52	.47	.42
179362	TIP32C-SAM	TO-220	PNP	-100	10 @ 3A	.58	.52	.47	.42
179371	TIP41C-SAM	TO-220	NPN	100	15 @ 3A	.66	.59	.53	.48
179389	TIP42C-SAM	TO-220	PNP	-100	15 @ 3A	.73	.66	.59	.53
179397	TIP50-SAM	TO-220	NPN	400	30 @ .3A	.77	.69	.62	.56

CDS Photocells

SAMSUNG

- Operating temperature: -30°C to +70°C
 Cadmium Sulfide (CDS)
 Soldering: 230°C for 3 seconds
- · Generate variable signal based on detection of light levels · Applications include: auto-focus lenses, exposure meters, contrast controls for TVs, dimmer or light switches, flame detectors, electronic toys, street lamp switches, optocouplers



	Part	Product	Size (i	nches)	Ra	ting	Resista	nce (Ω)	Lead Spacing	Lead Length		Prid	cing		
	Number	Number	Α	В	Vp	mW	Light	Dark	(inches)	(inches)	1	10	100	1000	
	136063	CDST18	0.14	0.17	20	40	10K	100K	0.10	1.50	\$.49	\$.39	\$.29	\$.25	
_	120310	CDS002	0.14	0.17	150	125	25K	2M	0.10	1.44	.55	.45	.35	.29	
	136047	CDST05	0.25	0.29	50	250	10K	100K	0.18	1.50	.55	.45	.25	.19	
	120301	CDS003	0.25	0.29	200	150	15K	500K	0.20	1.44	.69	.59	.49	.39	
	120299	CDS004	0.38	0.43	250	250	12K	1M	0.30	1.44	1.29	.99	.89	.69	
	136055	CDST08	0.40	0.44	50	250	10K	100K	0.30	1.50	.55	.45	.25	.19	

ZA Series Varistor (Radial Lead)

Maximum Clamping Voltage

@ Ip Value Current

Ip=2.0A

Amps

- Low DC voltage applications Printed circuit board designs
- UL recognized as "transient voltage surge suppressors"

Varistor Voltage

@ 1 mA DC Test Current

Min. V_{N(dc)} Max

Volts Volts

- Used for highly sensitive devices
 Low transient energy
- · Computer equipment · Alarm systems · Weight: .001 lbs.

Pricing

2.0 x 2.0 x 0.2

\$.35 | \$.29 | \$.25

10 100 1000



LA Series Varistors (Radial Lead)

AC power line applications
 Power supplies

UL recognized as "transient voltage surge suppressors"
UL recognized as "across-the-line components"
High energy absorption

			IVIax.	Rating	JS (+85°C)	Character	istics at 25°C			9	_
		Size	Conti	nuous	Transient	Maximum (Clamping Voltage				
LA Series Part Product		Disc.	RMS Voltage	DC Voltage	Energy (10/1000μs)	@ Ip Value Current (8/20µs)		34446		34	462
		Dia.	V _{m(ac)}	V _{m(dc)}	W _{tm}	V	Ip=2.0A		Pric	ing	
Number	Number	(mm)	Volts	Volts	Joules	Volts	Amps	1	10	100	1000
34454	V130LA2	7	130	175	11	340	10	\$.39	\$.35	\$.29	\$.19
34446	V130LA10A	14	130	175	38	340	50	.45	.39	.35	.29
34471	V250LA20A	14	250	330	72	650	50	.59	.49	.39	.35
34462	V130LA20A	20	130	175	70	340	100	.69	.59	.49	.39

JAMECO Thermoelectric Cooler Chips

Volts

Characteristics at 25°C

 Solid state heat pumps Operating voltage: 15.4VDC nominal

Volts

8.2 11.0

- T max (°C) = 60°C • 20 AWG wire leads, 4" long
- · Heat or cool by changing direction of current

Size

Dia.

ZA Series

Number

96891

Product

Number (mm)

- Cools down to -30°C (dependent on external temperature)
- Couples: # of P&N type semiconductor pairs connected electrically in series

79.1

• P/N 172	2030 / 172	048: 4A m	ax. • P/N	172056: 8A	max.			172048			
Part	Product			Voltage	Current	Size	Weight	Pri	cing		
No.	No.	Couples	Watts	(max.)DC	(max.) A	(L"xW"xT")	(lbs.)	1	10		
172030	TEC30	71	19.7	8.4	4	1.2 x 1.2 x 0.2	0.05	\$19.95	\$17.95		
172048	TEC40	127	35.6	15.4	4	1.6 x 1.6 x 0.2	0.07	25.95	22.95		

TO-3 and TO-220 Heat Sink **Mounting Kits**

• TO-3 and TO-220 heat sink insulator assemblies

• 10 per pack **34121**: 5 pc kit

34121 34139: 12 pc kit

Part No.	Product No.	Type	1	10	10
34121	T2★	TO-220	\$4.95	\$4.49	\$3.9
34139	T3	TO-3	4.95		





41.95

37.95

34139

Heat Sinks and Optoisolators

TO-3 Heat Sink

- TO-3 package
- Black anodized
- 4.8"L x 1.5"W x 1.3"H

Part No. Product No. Type 10 100 16512 DUDE4★ TO-3\$2.95 \$2.75 \$2.49

Wakefield

Thermalloy

TO-3 Heat Sink

- TO-3 style devices
- · Black anodized aluminum
- Spacers not included 1.9"L x 1.4"W x 1.3"H

Part No. Product No. Type 100 10 **151546** 635-125B2 TO-3**\$.99** \$.69

TO-3 Heat Sink w/ Mounting Screws

- TO-3 case style
- · Black anodized aluminum
- · Low profile; ideal for PC boards with 0.5" centering between boards
- 2.1"L x 2.3"W x 0.4"H

Part No. Product No. Type 10 100 163820 THM6061B2 TO-3\$.39 \$.35

TO-220 Heat Sink w/ Mounting Screws

- TO-220 case style
- Thermalloy Black anodized aluminum
- · Horizontal or vertical mounted
- 1.0"L x 1.6"W x 0.4"H

Part No. Prod. No. Type 100 **163811** THM7019 TO-220 ...\$.39 \$.35 \$.25 \$.19

T0-220 Heat Sink Clip

- · Light weight aluminum
- TO-220 case style
- 0.8"L x 1.0"W x 0.4"H

Part No. Prod. No. Type 100 1000 10 107297 PSC2-2U TO-220... ..\$.49 \$.45 \$.39

T0-220 Heat Sink Thermallov

- · Black anodized aluminum
- · Plastic power semi-conductor devices
- 0.8"L x 0.7"W x 0.4"H (P/N 70658)
- 1.2"L x 1.0"W x 0.5"H (P/N 129242)

Part No. Product No. Type 100 1000 1 10 70658 THM6073 TO-220..**\$.25** \$.22 \$.19 \$.17 129242 THM6106 TO-220.. .49 .39

Thermoelectric Coolers w/ Heat Sink

- · Removed from original equipment
- Cools down to 45°F
- · Maximum heat sink operating temperature: 100°C
- Operating input voltage: 13-15VDC
- · Input current: 4 amp nominal
- Recommend fan P/N 102875 (pg 101), 12VDC @ 740mA (fan installation is left up to the customer to meet their specific application)
- Heat or cool by changing direction of current
- · Rated lifetime over 200,000 hrs.
- · For stationary use recommend 13.8VDC @ 10A supply P/N 138667, pg 99
- 18 (AWG) wire leads, 3.0" length
- · Can operate from 12V car battery
- 131975: One heat sink

 Size: Heat sink: 5.0"L x 5.0"W x 1.3"H 2.7"L x 1.8"W x 1.2"H Pump:

147942: Two heat sinks

• Size: Heat sink: 5.0"L x 4.0"W x 1.4"H Pump: 6.0"L x 4.8"W x 0.7"H

Part No.	Description	Wt. (lbs.)	1	10
131975	Thermo. cooler, hs (1)) 1.9 \$24. 9	95	\$21.95
147942	Thermo. cooler, hs (2)) 2.4 27. 9	95	24.95

TO-220 Heat Sink

- TO-220 package
- Black anodized
- 1.2"L x 1.0"W x 0.5"H

Part No. Product No. Type 1 10 100 1000 **42622** 6030B★ TO-220..**\$.39** \$.35 \$.29 \$.25

AAVID

TO-220 Heat Sink

- TO-220 package
- · Black anodized
- 0.75"L x 0.52"W x 0.38"H

Part No. Product No. Type 10 100 1000 **158051** THM6078 TO-220..**\$.39 \$.35** \$.29 \$.25

T0-220 Heat Sink Wakefield

- TO-220 package
- Black anodized
- 0.9"L x 1.0"W x 0.4"H

Part No. Product No. Type 1000 1 10 100 291-36H★ TO-220..**\$.69** \$.59 \$.49 \$.45

T0-220 Heat Sink Thermalloy

- TO-220 case styles
- Aluminum
- 1.2"L x 1.0"W x 0.5"H

Part No. Product No. Type 10 100 THM6106 TO-220... \$.49 \$.29 ..\$.59

T0-220 Heat Sink

- · Wave solderable
- TO-220 case styles
- Black anodized aluminum
- 1.2"L x 1.0"W x 0.5"H

Part No. Product No. Type 70771 THM6038 TO-220..... ..\$.39

T0-220 Heat Sink

- TO-220 case styles
- Aluminum

129242

131975

147942

- · Good for high power devices
- 1.6"L x 2.0"W x 0.8"H

Part No. Product No. Type 10 \$.69 71301 THM7024 TO-220. .\$.79 \$.59

AAVID

167265

T0-218 and T0-220 **Heat Sinks**

- Aluminum
- · Vertical mount w/ solder tabs
- 167265: For TO-218 / TO-247
- Size: 2.0"L x 2.0"W x 0.5"H

167273: For TO-220 with thermal clip Size: 2.0"L x 1.9"W x 1.0"H

167273 Part No. Product No. Type

100 167265 AVD592201 TO-218/247 \$.29 \$.22 \$.17 167273 THM7023 TO-220

T0-218 and T0-220 Heat Sinks w/ PCB Mounting Clip







Thermalloy

163838 164734 163846

- · Black anodized aluminum
- · Can be mounted vertically w/ solderable mounting tabs or horizontally w/ studs

164734: 1.4"L x 1.8"W x 0.4"H: low profile

163846: 1.7"L x 1.8"W x 0.4"H 163838: 1.1"L x 1.9"W x 1.1"H

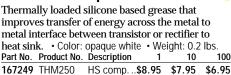
Part No. Product No. Type 10 164734 THM6072 TO-220.....\$.39 \$.35 \$.25 \$.19 163846 THM7021B TO-218/220 .39 .35 163838 THM7025 TO-218/220 .39

486 CPU Heat Sink See pg 102

- · Adhesive tape for mounting
- 1.7"L x 1.6"W x 0.4"H (P/N 129226)
- 1.7"L x 1.6"W x 0.7"H (P/N 129234) 129234 Part No. Product No. Type 10

129226 HS486-2 80486 CPU ...\$2.49 \$1.95 \$1.49 **129234** HS486-3 80486 CPU**2.95**

Thermalloy Inc. 2 oz. Tube **Heat Sink Compound**



TEGHSPRAY 4 oz. Heat Sink Compound

This silicone free compound provides more effective heat transfer. Will not harden, dry out, melt, or contaminate



169252 1978DP Heat sink comp .. \$16.95 \$14.95

ISOCOM Photo Darlington Optoisolator

- Isolation test volt.: 7.5KV (peak); 5.3KV (rms) • 40Vb
- Current transfer ratio:

.150"

Thermalloy

Thermallov

10

\$.35

tabs (2)

100

100

\$.29

- 200 (min. %) NPN transistor 5000Viso
- VBR (LED) Ir = 5μ A: 5V (min.) • 16-pin DIP
- · Continuous forward current: 50mA (max.)
- BVcEo (Ic = 1mA): 40V (min.)
- Iceo: (dark) Vce = 40V; 0.4nA (max.)
- 1.17Vf @ 10mA (typical)
- Vce: (Sat) IF = 10mA; Ic = 2mA; 1.0V (max.)
- VBR (LED) IR = 10µA: 5V min.

Part No. Product No. 10 100 160362 PS2502-4.....\$2.49 \$2.25 \$1.95 \$1.75

ISOCOM Photo Transistor In-Line Package

- NPN transistor 80Vb
- Isolation test volt.: 7.5KV (peak); 5.3KV (rms)
- Current transfer ratio: 80-6000 (min. %)
- Continuous forward current: 50mA (max.)
- 16-pin DIP • VBR (LED) Ir = 5μA: 5V (min.) • BVcEo (Ic = 1mA): 80V (min.) • 5000Viso
- Iceo: (dark) Vce = 40V; 100nA (max)
- 1.17Vf @ 10mA (typical)
- Vce: (Sat) IF = 10mA; Ic = 2mA; 0.3V (max.)
- VBR (LED) IR = 10µA: 5V min.

Part No. Product No. 100 500 **160338** PS2501-4......\$1.55 \$1.39 \$1.25 \$1.15

QT AC / DC to Logic Interface Optocoupler

- · AC or DC input
- Programmable sense voltage
- · Logic level compatibility
- Applications: low voltage detection, current sensing, 5V to 240V AC/DC sensing, industrial controls
- · Supply voltage: 18V maximum
- Operating frequency: 4KHz maximum
- · Withstanding insulation voltage: 2.5KV (rms) min.
- Propagation delay time: (to output low level) {R_I = 4.7Ω , $C_1 = 30pF$ 6.0us

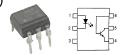
Part No. Product No. 10 173534 HCPL-3700......\$5.95 \$5.35 \$4.79 \$4.39





Photo Transistors General Purpose (6-Pin DIP)

- Base lead connected
 NPN output transistor
- ICEO (dark) VCE = 10V: 50nA max.
- · Isolation test voltage (KV): 7.5 (pk); 5.3 (rms)
- 160426/160434: BVCEO = 70VDC



			, , , , ,					
Part	Product	Curr. Transfer	Cont. Fwd. Curr.	Vce (Sat)		Pric	ing	
Number	Number	Ratio (Min%)	Max. (mA)	Min. (V)	1	10	100	500
40985	4N25★	20		0.5	\$.29	\$.25	\$.22	\$.19
41005	4N26	20	50	(IF = 50mA)	.29	.25	.22	.19
144240	4N27	10		(Ic = 2mA)	.29	.25	.22	.19
41013	4N28	10		0.3 (IF = 10mA)	.25	.22	.19	.16
41056	4N35★	100	50	(Ic = 0.5mA)	.35	.29	.25	.19
160426	CNY17-3	100		0.27	.25	.19	.15	.12
160434	CNY17-4	160	60	(IF = 10mA) (Ic = 2.5mA)	.25	.19	.15	.12
172187	H11AX	10	10	0.2 (IF = 10mA) (IC = 0.5mA)	.22	.19	.17	.15

Photo Darlingtons With Base Connection (6-Pin DIP)

- 41021/41030: Photo darlington transistor detector base lead connected • BVčEo Ic =1mA: 30V min
- Current transfer ratio IF=10mA VcE = 10V
- Isolation voltage (KV): 7.5 (pk); 5.3 (rms)

184735: • BVcEo Ic =10mA: 25V • Current transfer ratio: IF=1mA VcE = 5V

Part	Product	Curr. Transfer	Cont. Fwd. Curr.	Vce (Sat)		Pricing		
Number	Number	Ratio (Min%)	Max. (mA)	Max. (V)	1	10	100	500
41021	4N32	500	80	1.0 (IF = 8mA)	\$.35	\$.29	\$.25	\$.19
41030	4N33★	500	00	(Ic`= 2mA) ´	.35	.29	.25	.19
184735	H11B1	500	100	1.0 (IF = 1mA)	.29	.25	.19	.17
				(Ic`= 1mA) ´				

Photo Transistor Low Input Photo Transistor

- Isolation volt (KV): 7.5 (pk); 5.3 (rms)
- 4-pin DIP

Part

Number



\$.79

\$.69

\$.59

Photo 1	ransisto	r Sina	le Channel (6-Pir	n DIP)	_
138069	ISP817-3	70V	70/100	10V	\$.89
ı			138069 ISP817-3 70V Photo Transistor <i>Sing</i>		138069 ISP817-3 70V 70/100 10V Photo Transistor Single Channel (6-Pin DIP)

	ad conne n test vo	ected oltage (KV): 7.5 ((pk); 5.3	s (rms)	,	1	
Part	Product	Curr. Tran.Ratio Cont. F	wd. Curr.	Vce (Sat)	Pricin	q

Part	Product	Curr. Tran.Ratio	Cont. Fwd. Curr.	Vce (Sat)		Pric	ing	
Number	Number	IF=10mA (min)	Max. (mA)	IF=16mA Ic=2mA	1	10	100	500
24900	MCT2	20%	50	0.4V (max)	\$.35	\$.29	\$.25	\$.22

Photo Transistor Dual Channel (8-Pin DIP)

- Two independent isolators in one package
- Isolation breakdown volt. (KV): 7.5 (pk): 5.3 (rms)

13014110	II DI CUIN	JOVVII VOIL. (ivv). 7.5 (pi	.), 5.5 (1115)						
Part	Product	Curr. Tran.Ratio	Cont. Fwd. Curr.	Vce (Sat)		Pricing				
Number	Number	Ir=10mA (min)	Max. (mA)	IF=16mA Ic=2mA	1	10	100	500		
24918	MCT6	20%	50	0.4V (max)	\$.59	\$.55	\$.49	\$.45		

Schmitt Trigger Single Channel (6-Pin DIP)

- · Microprocessor compatible
- Isolation breakdown volt. (KV): 7.5 (pk): 5.3 (rms)

13014110	ii bi cuiv	aowii voit.	,ivv). 7.5 (p	k), 5.5 (IIII5)			_	
				Output Volt (low)				
Part	Product	$RL = 270\Omega \text{ Vcc} = 5V$ $RL=270\Omega \text{ Vcc}=5V$		Pric	ing			
Number	Number	Turn-On (max)	Turn-Off (min)	Max. (V)	1	10	100	500
113988	H11L1	1.6mA	0.3mA	0.4	\$.79	\$.75	\$.69	\$.59

AC Input Isolator Single Channel (6-Pin DIP)

- · Isolation breakdown volt. (KV): 7.5 (pk); 5.3 (rms)
- VF (LED) IF=10mA: 1.5V max.
- BVcEo Ic=1mA: 30V min.

Part	Product	Curr. Transfer	Cont. Fwd. Curr.	Vce (Sat)		Prid	ing	
Number	Number	Ratio (Min%)	Max. (mA)	IF=10mA Ic=0.5mA	1	10	100	500
18825	H11AA1	20	100	0.4V (max)	\$.49	\$.45	\$.39	\$.35

Photo SCR Single Channel (6-Pin DIP)

- · Infrared LED emitter and light activated SCR
- Isolation voltage (KV): 7.5 (pk); 5.3 (rms)
- Continuous forward current: 60mA max.

Part	Product	Input Trig. Curr. (max)	Peak Off St. Rev. Curr. (max)		Pri	cing	
Number	Number	V _{TM} = 3V	VDRM=rated RGK=10KΩ	1	10	100	500
18833	H11C3	14mA	200nA	\$.85	\$.79	\$.69	\$.65

Single Channel Transistor Slotted Interrupter (4-Pin DIP)

- 114091: With mounting tabs 114104: Without mounting tabs
 - VF: 1.7V max. @ 60mA

l	Part	Product	BVeco	BVeco	ICEO (max)		Prici	ng	
l	Number	Number	I _C = 1mA	I _E = 100μA	Vce = 25V Ih = 0	1	10	100	500
l	114091	H21A1	30V min	6.0Vmin	100nA	\$.89	\$.76	\$.69	\$.65
l	114104	H22A1	30V max	6.0Vmax	TOOTIA	.69	.65	.59	.55

Quad Channel High Isolation Voltage/CTR/Sensitivity

- Four independent isolators in one package 16-pin DIP
- Isolation breakdown voltage (KV): 7.5 (pk); 5.3 (rms)

Part	Product	Curr. Trans. Ratio (Min%)	Cont. Fwd. Curr.	r. Pricing			
Number	Number	IF = 10mA VCE = 10V	Max. (mA)	1	10	100	500
114083	ISQ203	225-450 / 50 ³		\$2.95	\$2.49	\$2.29	\$1.95
114075	ISQ204	200-400 / 100 ³	50	2.95	2.75	2.49	1.95

High Speed Transistor Coupler Single Channel (8-Pin DIP)

- · Isolation voltage: 2.5KV (rms) min.
- Propagation delay time Vcc = 5V; IF = 16mA: 0.8 (RL = 1.9KΩ) µS max.

l	Part	Product	Curr. Transfer	Specified Input	Typical Data		Pricir	ng	
l	Number	Number	Ratio (Min%)	Current (mA)	Rate (NRZ)	1	10	100	500
l	42471	6N136	19	16	1Mbits/s	\$.89	\$.79	\$.69	\$.59

High Speed, High Gain Couplers Single Channel (8-Pin DIP)

- Isolation voltage: 2.5KV (rms) min.
- P/N 113929: Propagation delay time tPHL: 25 (IF=0.5mA) (RL=4.7K Ω)
- P/N 42489: Propagation delay time tPHL: 10 (IF=1.6mA) (RL=2.2KΩ)

Part	Product	Curr. Transfer	Specified Input	Typical Data		Pricir	ng	
Number	Number	Ratio (Min%)	Current (mA)	Rate (NRZ)	1	10	100	500
113929	6N139	400	0.5	300Kbits/s	\$.99	\$.89	\$.79	\$.69
42489	6N138	300	1.6	CCCACCAC	.99	.89	.79	.69

Very High Speed Logic Coupler Single Channel (8-Pin DIP)

- · Isolation voltage: 2.5KV (rms) min.
- Propagation delay time R_L = 350Ω; C_L = 15pF;
- IF = 7.5mA: tphl 75nS max. LSTTL/TTL compatible

Part		Product	Curr. Transfer	Specified Input	Typical Data		Prici	ng	
Num	ber	Number	Ratio (Min%)	Current (mA)	Rate (NRZ)	1	10	100	500
113	3911	6N137	700	5	10Mbits/s	\$.99	\$.89	\$.79	\$.69
		•							

FET Coupler Single Channel (6-Pin DIP)

- · Optically coupled pair with symmetrical bilateral silicon detector
- On state resistance IF = 16mA; I46= 100μA: 200Ω max
- Isolation breakdown voltage (KV): 7.5 (pk); 5.3 (rms)

Part	Product	Output Brkdwn	Cont. Fwd. Curr.	Off State Curr.		Prici	ng	
Number	Number	Volt. 146=10µA	Max. (mA)	I46 = 15V	1	10	100	500
113996	H11F1	30V (min)	60	50nA (max)	\$2.75	\$2.49	\$2.25	\$1.95

Zero Crossing Triac Couplers Single Channel (6-Pin DIP)

- Performs the function of a zero voltage crossing bilateral triac driver
- Isolation voltage (KV): 7.5 (pk); 5.3 (rms)

Part	Product	Input Trig. Curr.	Cont. Fwd. Curr.	Peak Block		Pricir	ng	
Number	Number	VTM=3V (Max)	Max (mA)	Volt. Min (V)	1	10	100	500
26294	MOC3031	15mA		250	\$1.09	\$.99	\$.89	\$.79
113953	MOC3032	10mA	50	250	1.09	.99	.89	.79
113961	MOC3042	10mA	30	400	1.15	1.05	.95	.85
133874	MOC3063	5mA		600	1.49	1.25	1.09	.99

Triac Couplers Single Channel (6-Pin DIP)

- · Infrared emitter and light activated silicon bilateral switch
- Isolation voltage (KV): 7.5 (pk); 5.3 (rms)

ı	Part	Product	Input Trig. Curr.	Cont. Fwd. Curr.	Peak Block		Prici	ng	
l	Number	Number	V _D =3V (Max)	Max (mA)	Volt. Min (V)	1	10	100	500
l	26278	MOC3010	15mA		250	\$.49	\$.45	\$.39	\$.35
l	95020	MOC3011	10mA	60	250	.55	.49	.45	.35
l	95038	MOC3021	15mA		400	.75	.69	.55	.45





LEDs 32

Typical DC forward current 20mA

• Weight: .01 lbs.

1Reverse polarity to change color

† Has internal current limiting resistor

* Prepackaged: order in increments of 10, 100 or 1000















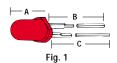


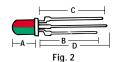


A +D B	Fig. 3	A B D
Fig. 1 C	⊢D⊣	Fig. 5
Fig. 2	Fig. 4	A B Fig. 6

<u> </u>						rig. z				riy.	· ·	ЩТ		Fig. 6			FIÇ	j. 0	
Pa Nu		Product Number	Fig.	Emitting Color	Lens/Feature Description	LED Size	Diameter inch/mm	Dim A	ension B	s (Inch		Lead Spacing	Typical Vf @ If (mA)	Typical mcd @ mA	Wave Length nm	1	Pri 10	cing 100	1000
	745	MV50	3	Red	Water clear	T3/4	.083/2.1	0.06	0.25	0.25	_	0.11	1.7 @ 20	1.4 @ 20	660	\$.39	\$.35	\$.29	\$.25
	6532	MV50G	8	Green	Water clear	T3/4	.069/1.7	0.06	0.40	0.40	0.05	0.08	2.1 @ 20	300 @ 20	568	.39	.35	.29	.25
	5708	HMLP-6014	8	Orange Red	Red diffused	T3/4	.080/1.66	0.58	0.40	0.40	0.55	0.00	1.7 @ 20	1.4 @ 20	660	.35	.29	.25	.19
	4869	RRL5621				T3/4	.083/2.1	0.09	0.40	0.40	0.55	0.07	5.0 @ 8		650			.15	
			3	Orange Red	Red diffused (5V) ^T			l			000			1.2@8		*	.19		.10
	4673	BR209	1	Red	Water clear	T1	.119/3	0.14	0.98	1.05	0.03	0.07	2.8 @ 20	12.0 @ 10	697	*	.12	.09	.05
	4681	BG209	1	Green	Water clear	T1	.119/3	0.14	0.98	1.05	0.03	0.07	2.8 @ 20	120.0 @ 20	563	*	.15	.12	.09
	2885	TFUW1204C	1	White	Water clear	T1	.119/3	0.22	0.84	0.90	0.04	0.08	3.6 @ 20	2300.0 @ 20		4.49	3.75	2.95	2.75
	5679	LTL-232	1	Green	Green clear	T1	.119/3	0.17	0.69	0.76	0.03	0.08	2.1 @ 20	120.0 @ 20	563	*	.15	.12	.09
	6493	BY209	1	Yellow	Yellow clear	T1	.119/3	0.20	0.95	1.00	0.04	0.10	2.1 @ 20	19.0 @ 20	585	*	.15	.10	.07
	7411	LVB2040	1	Blue	Blue diffused	T1	.119/3	0.21	0.98	1.03	0.04	0.10	5.5 @ 20	7.0 @ 20	430	2.75	2.49	2.25	1.75
	606	XC209G★	1	Green	Green diffused	T1	.119/3	0.13	1.05	1.10	0.03	0.08	2.8 @ 20	15 @ 10	560	*	.15	.10	.06
	657	XC209Y★	1	Yellow	Yellow diffused	T1	.119/3	0.16	0.68	0.76	0.04	0.08	2.8 @ 20	6.5 @ 10	585	*	.15	.10	.06
	622	XC209R★	1	Orange Red	Red diffused	T1	.119/3	0.14	1.09	1.14	0.04	0.09	2.0 @ 20	1.5 @ 10	655	*	.15	.10	.06
	529	XC209RB★	1	Red	Red diffused	T1	.119/3	0.18	1.04	1.13	0.03	0.07	2.0 @ 20	2.7 @ 20	700	*	.19	.12	.09
	3941	XC5391GY	1	Green/Yellow	White diff. bi-color/bi-state ¹	T1	.119/3	0.18	0.86	0.93	0.03	0.08	2.6 @ 10	2.0 @ 10	565/585	*	.19	.12	.09
	553	XC5391	1	Red/Green	White diff. bi-color/bi-state ¹	T1	.119/3	0.18	1.06	1.12	0.03	0.08	2.8 @ 20	3.0 & 15 @ 10	697/565	*	.19	.15	.12
	6282	LXH240LIID	2	Orange Red	Red diffused dual	T1	.119/3	0.36	0.13	0.13		0.10	1.8@5	1.0@2	635	*	.19	.15	.12
13	6274	LXH240LGGD	2	Green	Green diffused dual	T1	.119/3	0.36	0.13	0.13		0.10	2.1@25	15.0 @ 20	565	*	.19	.15	.12
10	4248	XC410R	4	Red	Red diffused	T1 3/4	.197/5	0.35	0.89	0.95	0.23	0.08	2.8 @ 20	6.5 @ 10	697	*	.19	.15	.12
10	4264	XC410Y	4	Yellow	Yellow diffused	T1 3/4	.197/5	0.35	0.89	0.95	0.23	0.08	2.8 @ 20	2.5 @ 10	585	.29	.25	.19	.15
10	4256	XC410G	4	Green	Green diffused	T1 3/4	.197/5	0.35	0.89	0.95	0.23	0.08	2.2@20	6.0 @ 10	570	.29	.25	.19	.12
18	3231	MCDPW504	1	White	Water clear	T1 3/4	.197/5	0.30	1.06	1.12	0.04	0.08	3.6 @ 20	3000.0 @ 20	-	3.25	2.95	2.59	2.25
14:	2893	TFUW83C	1	White	Water clear	T1 3/4	.197/5	0.34	0.79	0.88	0.04	0.08	3.6 @ 20	3700.0 @ 20	-	4.15	3.79	3.15	2.95
34	745	XC554R★	1	Red	Water clear	T1 3/4	.197/5	0.30	1.00	1.12	0.04	0.08	2.8 @ 20	7.5 @ 10	697	*	.15	.10	.08
11	797	BR5704★	1	Red Super Bright	Water clear	T13/4	.197/5	0.29	1.05	1.11	0.03	0.07	2.0 @ 20	80.0 @ 20	660	*	.17	.12	.09
17	5695	LTL-4258	1	Yellow	Water clear	T13/4	.197/5	0.30	1.07	1.15	0.03	0.08	2.1 @ 20	220.0 @ 20	595	.29	.25	.19	.15
15	3138	LT2KJ3-UR-S14	1	Orange	Water clear	T1 3/4	.197/5	0.36	0.90	0.95		0.10	2.4 @ 20	2500.0 @ 20	621	.49	.45	.39	.29
13	1895	TLSH180P	1	Orange Ultra Bright	Water clear	T1 3/4	.197/5	0.39	0.80	0.86	0.06	0.10	2.1 @ 20	7000.0 @ 20	623	2.49	2.25	1.75	1.49
13	7613	LVB3333	1	Blue Super Bright	Water clear	T1 3/4	.197/5	0.34	0.98	1.03	0.04	0.08	5.5 @ 20	190.0 @ 20	430	2.75	2.49	2.25	1.95
13	4332	383UBC	1	Blue Super Bright	Water clear	T1 3/4	.197/5	0.30	0.93	1.00	0.04	0.10	5.0 @ 20	1980.0 @ 20	430	2.95	2.75	2.25	1.95
	359	BG5704★	1		Water clear	T13/4	.197/5	0.30	1.04	1.12	0.04	0.07	2.1 @ 20	40.0 @ 20	555	*	.19	.12	.08
	3154	HLMP-8509	1	Green	Water clear	T13/4	.197/5	0.36	0.90	0.95		0.10	2.2 @ 20	300.0 @ 20	568	.29	.25	.19	.15
	3222	MCDL513	1	Blue	Water clear	T13/4	.197/5	0.29	1.02	1.13	0.04	0.08	5.0 @ 20	3000.0 @ 20	470	3.25	2.95	2.59	2.25
	3214	MCDPG503	1	Green	Water clear	T13/4	.197/5	0.30	1.04	1.09	0.04	0.08	3.5 @ 20	2200.0 @ 20	515	3.25	2.95	2.59	2.25
	3146	LT2K33-URP-8	1	Yellow	Water clear	T13/4	.197/5	0.36	0.90	0.95		0.10	2.4 @ 20	9300.0 @ 20	595	.65	.55	.49	.39
	5687	LTL-10234	1	Green	Green clear	T13/4	.197/5	0.24	1.07	1.14	0.05	0.07	2.0 @ 20	40 @ 20	555	*	.19	.12	.08
	8691	LVB3330★	1	Blue	Blue diffused	T13/4	.197/5	0.34	0.98	1.03	0.06	0.08	5.5 @ 20	10.0 @ 20	430	2.75	2.49	1.95	1.75
	761	XC556G★	1	Green	Green diffused	T13/4	.197/5	0.31	0.79	0.88	0.04	0.09	2.8 @ 20	12.0 @ 10	565	*	.12	.09	.05
	7393	XC556A★	1	Orange Red	Orange diffused	T13/4	.197/5	0.30	1.02	1.08	0.04	0.07	2.8 @ 20	12.0 @ 20	635	*	.15	.10	.06
	B25	XC556Y★	1	Yellow	Yellow diffused	T13/4	.197/5	0.30	0.82	0.84	0.03	0.07	2.8 @ 20	0.5 @ 10	585	*	.15	.10	.06
	511	XC556RB★	1	Red	Red diffused	T13/4	.197/5	0.31	0.81	0.86	0.03	0.07	2.8 @ 10	4.0 @ 10	697	*	.15	.10	.06
	796	XC556R★	1	Orange Red	Red diffused	T13/4	.197/5	0.30	0.62	0.68	0.04	0.08	2.0 @ 10	1.5 @ 10	655	*	.15	.10	.06
	5597	LTL307E	1	Orange Red	Red diffused	T13/4	.197/5	0.34	1.00	1.05	0.04	0.07	2.8 @ 20	19.0 @ 10	635	*	.19	.12	.09
	561	XC5408	1	Green	Green diffused/flashing	T13/4	.197/5	0.30	1.05	1.11	0.03	0.07	1.2 @ 20	17.0 @ 10	565	.49	.45	.39	.29
	690	XC5410★	1	Red	Red diffused/flashing	T13/4	.197/5	0.30	0.94	0.98	0.04	0.07	1.2 @ 20	2.8 @ 20	697	.49	.45	.39	.29
	8860	LFH3363	1	Red	Water clear/flashingt	T13/4	.197/5	0.35	1.06	1.15	0.04	0.07	3-15 @ 20	7.5 @ 20	697	.49	.45	.39	.29
	673	XC52RG★	5	Red/Green	White diff. bi-color/tri-state ¹	T13/4	.197/5	0.30	1.02	1.05	1.12	0.10	2.8 @ 20	3.0 & 12 @ 10	697/565	.29	.25	.19	.12
	711	XC5491★	1	Red/Green	White diff. bi-color/bi-state ¹	T13/4	.197/5	0.30	1.02	1.06	0.04	0.03	2.8 @ 20	4.5 @ 20	695/565	.29	.25	.19	.12
	9634	LT9552L	1	Red Super Bright	Red diffused Jumbo	T21/2	.315/8	0.30	0.84	1.00	0.04	0.09	2.4 @ 20	4.5 @ 20 100.0 @ 20		.29	.25	.19	.12
		L19002L LVG3930N		Green	Green diffused Jumbo			0.44	1.04	1.00	0.07		2.4 @ 20 1.7 @ 20	40.0 @ 20	660 565		.25	.25	
	7621 984	LVG393UN XC10G★	1		Green diff. XJumbo	T21/2	.315/8 .394/10		1.04	1.09	0.07	0.07	2.8 @ 20	40.0 @ 20	565 545	*		.25	.19 .12
			1	Green		T31/4		0.40				0.08			565	*	.19		
	8683	XC10RB★	1	Red	Red diffused XJumbo	T31/4	.394/10	0.40	1.04	1.08	0.07	0.10	1.5 @ 20	200.0 @ 20	660	.29	.25	.19	.15
	992	LY3630★	1	Yellow	Yellow diff. XJumbo	T31/4	.394/10	0.54	1.04	1.11	0.08	0.08	2.1 @ 20	8.0 @ 20	585	.29	.25	.19	.15
	4889	XC620RG	7	Red/Green	White diff. bi-color rect.	2x5		0.27	1.02	1.05	1.13	0.08	2.2 @ 20	3.5/6 @ 10	695/570	*	.19	.15	.12
	545	XC57124G	6	Green	Green diffused rectangular	3.5x6		0.26	1.06	1.11		0.08	2.2 @ 20	5.0 @ 20	565	.35	.29	.25	.19
34	850	LT7341R-81	6	Orange Red	Red diffused rectangular	3.5x6		0.27	0.85	0.93		0.07	2.0 @ 20	10.1 @ 20	635	.35	.29	.25	.19

- Typical DC forward current 20mA
- · Weight: .01 lbs.
- * Prepackaged: order in increments of 10, 100 or 1000







152864

Ledtech is a QS9000 and ISO9000 Certified Company

151415

						. .	Dim	ension	ns (Inch	ies)				Wave		Pri	cing	
Part Number	Product Number	Fin	Emitting Color	Lens/Feature Description	LED Size	Diameter inch/mm	Α	В	С	D	Lead Spacing	Typical Vf @ If (mA)	Typical mcd @ mA	Length nm	1	10	100	1000
156929		1	Green	Green diffused	T1	.118/3	0.16		0.94		0.10	2.1@20	13.3 @ 20	567	*	\$.15	\$.12	\$.09
156937		1	Yellow	Yellow diffused	T1	.118/3	0.16		0.94		0.10	2.1@20	11 @ 20	585	*	.15	.12	.09
156945		2	Red/Green	White diff, bi-color tri-state		.119/3	0.16		0.94	1.0	0.08	2.1@20	14/3 @ 20	700/567	.29	.25	.19	.15
156953		1	Red Supr Brt	Water clear	T1	.119/3	0.21	1.07	1.14		0.08	1.7 @ 20	600@20	660	*	.15	.12	.09
	LT0324-41		Green	Green clear	T1	.119/3	0.20	0.89	0.95		0.10	2.1 @ 20	20 @ 20	567	*	.12	.09	.07
	LT0344R-41		Orange Red	Red clear	T1	.119/3	0.20	0.89	0.95		0.10	2.1 @ 20	23.5 @ 10	635	*	.12	.09	.07
	LT0341R-41		Orange Red	Red diffused	T1	.119/3	0.20	0.89	0.95		0.10	2.1 @ 20	6.9 @ 10	635	*	.12	.09	.07
152792	LT1833-81M1	1		Water clear	T13/4	.197/5	0.34	0.89	0.95		0.10	2.1 @ 20	420 @ 20	595	.35	.29	.25	.19
152821	LT1821-81-HE	1	Green	Green diffused	T13/4	.197/5	0.34	0.89	0.95		0.10	2.2 @ 20	100 @ 20	567	*	.15	.12	.09
156961	LT1823-81-HE	1	Green	Water clear	T13/4	.197/5	0.34	0.87	0.97		0.10	2.2 @ 20	500 @ 20	567	*	.15	.12	.09
152830	LT1831-81UR	1	Yellow Ultra Brt	Yellow diffused	T13/4	.197/5	0.34	0.89	0.95		0.10	2.1 @ 20	400 @ 20	595	.49	.45	.39	.29
152856	LT1841R-81	1	Orange Red	Red diffused	T13/4	.197/5	0.34	0.89	0.95		0.10	2.1 @ 20	10.3 @ 10	635	*	.12	.09	.06
152864	LT1873-81	1	Red Supr Brt	Water clear	T13/4	.197/5	0.34	0.89	0.95		0.10	1.7 @ 20	1000 @ 20	660	*	.15	.12	.09
152805	LT1873-81-UR	1	Red Ultra Brt	Water clear	T13/4	.197/5	0.34	0.89	0.95		0.10	1.9 @ 20	2000@20	660	.35	.29	.25	.19
156970	LT1873-UR-C07	1	Red Ultra Brt	Water clear (wide angle)	T13/4	.197/5	0.34	0.89	0.95		0.10	1.9 @ 20	2112@20	660	.35	.29	.25	.19
						Whi	te Dif	fused	Backl	ight								
151415	LTIF24-A2-S1	-	Green	Backlight, white diffused	2.0	5"L x 0.78"l	H x 0.	09"T		8-p	in	6.0 @ 20	6.0 @ 20	567	2.95	2.49	1.95	1.49

LED Accessories

JAMECO LED Mounting Hardware

Description

T1 snap-in

T13/4 ring & clip

Rect. snap-in

 P/N 95521: for use with rectangular LEDs with case size 0.244"L x 0.145"W x 0.270"H

Product No.

LMH100★

LMH200*

LMH250

* Prepackaged: please order in increments of 10, 100 or 1000



Mounting

Hole (in.)

.185

.257

306 x .202



*

*



1000

.08

.08

\$.06

Pricing

10

\$.11

.12

100

.10

\$.08



Use with P/N 143036,

143044 and 143052

assemblies – below)

(LED T13/4 cable

Part No. Product No.



10 100 1000

* Prepackaged: please order in increments of 10, 100 or 1000												
Part No.	Product No.	Color	10	100	1000							
143183	SMC170CTP	Clear*	\$.19	\$.17	\$.15							
735	T1	3/4 Cliplit	e® Lo	ens								

T1 & T13/4 Cliplite® LED Mounting Hardware

Color

black

black

black

- Material: lens polycarbonate; spacer nylon Increases apparent brightness up to 125% and viewing
- angle up to 180° with either diffused or nondiffused LEDs · Helps guard components from electrostatic discharge up
- to 16KV while affording the LED physical protection
- .375" centers spacing

Part No.

95513

23077

95521

* Prepackaged: please order in increments of 10, 100 or 1000



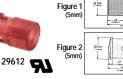
Panel

Thickness

up to .070"

up to .125"

up to .092"



			_		Mounting	Panel		Pı	icing			
Part No.	Product No.	Description	Color	Figure	Hole (in.)	Thickness	1	1 10 100 1		1000		
124919	SML190RTP	T1	red	1	.25	.063" –.125"	*	\$.19	\$.15	\$.12		
14277	CTP280	T13/4	clear	1	.25	.063" –.125"	.25	.22	.19	.15		
29612	RTP280	T13/4	red	1	.25	.063" –.125"	.25	.22	.19	.15		
124927	CLB300CTP	T13/4	clear	2	.25	.031" – .25"	.25	.22	.19	.15		
124951	CLB300RTP	T13/4	red	1	.25	.031" – .25"	.25	.22	.19	.15		

Leater Backlight LED

- · Backlight, white diffused
- · Emitting color: green
- Pins: 8
- Typical 6.0Vf @ 20If (mA)
- Typical 6.0mcd @ 20mA
- Wavelengh: 567nm
 Size: 2.05"L x 0.78"H x 0.09"T Part No. Product No. 151415 LTIF24-A2-S1 ..\$2.95 \$2.49 \$1.95 \$1.49

LED Grab Bag

More Grab Bags

on page 23

- 1900 piece assortment
- Various sizes
- · Various colors

Part No. Product No. Wt. (lbs) 135271 GB110LB 1.0....\$44.95 \$39.95 \$35.95

Conxrite® Cable Assemblies for T1 and T13/4 LEDs



T1 LED Cable Assemblies

· Use with lens P/N 143183 (above)

Part No.	Product No.	Cable Lgth	1	10	100	1000
143087	BE2108	8.5"\$1	.49	\$1.25	\$1.09	\$.99
143095	BE2112	12"1	.49	1.25	1.09	.99

T13/4 LED Cable Assemblies

· Use with lens P/N 143132 (above)

Part No.	Product No.	Cable Lgth	1	10	100	1000
143036	CE2108	8.5" \$1	.49	\$1.25	\$1.09	\$.99
143044	CE2112	12" 1	.49	1.25	1.09	.99
143052	CE2118	18" 1	.75	1.49	1.25	1.09

143132 CMC321CTP Clear* \$.17 \$.15 \$.12 Design Engineer's 139 Piece LED Hardware Assortment

* Prepackaged: please order in increments of 10, 100 or 1000

Color

Allows you to mount LEDs for different applications and designs. Eliminates soldering, shrink tubing and terminal crimping.

 139 piece hardware kit for T1 and T13/4 LEDs

Clear plastic case w/ dividers

Size: 8.5"L x 4.5"W x 1.5"H • Weight: 0.4 lbs.

	3120. 0.3 L X 4.3 W X 1.3 TT Weight. 0.4 lb3.										
	Includes: LED panel lenses and mounts	 Colors: clear, red, yellow, green and blue Shapes: round, square Retainers 									
	Pre-wired solderless LED interconnection	Varied lengths Standard header pin connector termination Crimp type removable connector pins									
	LED PCB mounts, sockets and standoffs	Vertical and horizontal mount Various height LED standoffs SMT-type connectors Through hole type connectors Resistor-type connectors z									
Р	Part No. Description Price										

140759 Engineer's LED hardware kit\$17.95



LED Indicators and Lamps

Panel Mount LED Indicators

- · Easy panel installation
- instrument indicators



141129/141137

- Panel (Vf @ If): 2V @ 20mA
- · Color: red · Weight: 0.01 lbs.

Part No.	Product No.	Mounting Hole (in.) 1	10	100	1000
	L922SRD	.23\$.79			\$.39
141129	L913RD	.24 .89	.79	.65	.45
141137	L917RD	.31 .89	.79	.65	.45

Cluster Type T1 3/4 LED Lamps

150914

· 8 green/6 red

· Weight: 0.1 lbs.

• 7" lead wire

- Cluster type red/green T13/4 LEDs
- Lens: water clear 3 lead wires
- 660nm for red/570nm for green
- · Common anode
- · Mounting screws
- 150922:
- · Vf @ If (mA): 10 @ 20
- · 1950 mcd @ 20mA • Size: 1.02"Dia. x 1.51"L
- 150914: • Vf @ If (mA): 20.5 @ 40 • 30 green/20 red
- · 12000 mcd @ 40mA
- 16" lead wire • Size: 2.07"Dia. x 1.98"L · Weight: 0.2 lbs.

Part No.	Product No.	Mtng Hole	1	10	25	100
150922	LCR2614B-79	M3 \$3. 9	95	\$3.55	\$3.19	\$2.89
150914	LCR5250A-7	9 M4 17. 9	95	14.95	13.49	11.95

JKL Single Lead Tipless Type Fluorescent & Ultra Violet Lamps

World's smallest fluorescent and ultra violet lamps. These energy efficient miniature lighting innovations assure you of bright, uniform output, long life, cool operation and

unmatched reliability, with the convenience of off-the-shelf availability.

142244/142965: compatible with P/N 142252 (below) 146165/146157: compatible with P/N 146190 (below)

146202: requires $15K\Omega$ series resistor, runs off line voltage

Fluorescent Lamps * Circuit voltage

Part Number	Starting Volt. (Vrms)	Lamp Volt. (Vrms)	Intensity (nt)	Lamp Current (mA)	Size (in.) L x Dia.	Weight (lbs.)	1	10	25
146202	75 (max.)	115*	_	3.0	0.9 x .23	0.01	\$2.95	\$2.49	\$1.95
142244	390	170	3500	5.0 (12 max.)	2.0 x .25	0.01	12.95	11.49	10.25
146157	850	345	2400	5.0	6.3 x .12	0.07	12.95	11.49	10.25
146165	1200	520	28000	5.0	10.0 x .12	0.10	12.95	11.49	10.25

Ultra Violet Lamp

Part Number	Starting Volt. (Vrms)	Lamp Volt. (Vrms)	Total Output Flux	Lamp Current (mA)	Size (in.) L x Dia.	Weight (lbs.)	1	10	25
142965	900	195	.25mW/cm ² @ 1"	2.5	2.0 x .12	0.01	\$10.95	\$9.95	\$8.95

JKL Fluorescent Lamp Power Supplies

These DC inverters are designed especially for cold cathode fluorescent lamps.

· Output voltage:

146190: 600Vrms @ 4mA, 30kHz

142252: 850Vrms @ 5.5A, 20kHz

Part No. Product No.	Input Voltage	PCB Size (W x H x T)	Weight (lbs.)	1	10	25
146190 65010	5VDC @ 200mA	1.7" x 0.8" x .04"	0.02	\$14.95	\$13.49	\$11.95
142252 12200	12VDC @ 260mA	1.8" x 0.8" x .04"	0.03	15.95	14.49	12.95

Incandescent Lamps

Incandescent Lamps

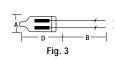
- Average life hours 10,000-50,000 hours
- P/N 141006/141073/141065: C2R filament type







146190



142252

142244

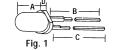
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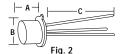
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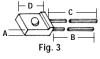
					Dia.(Ins./mm)	Dimensions (Ins.)			Pricing					
Part No.	Product No.	Fig.	Size	Description	Α	В	С	D	Ε	Vf @ If (mA)	1	10	100	1000
141057	6833	1	T 3/4	Incandescent lamp (1" lead wire)	.08/2.2	1	1.2	0.2	_	5 @ 60	\$.45	\$.35	\$.29	\$.19
141065	2200	1	T1 3/4	Incandescent lamp (1" lead wire)	.19/4.9	1	1.5	0.5	_	5 @ 60	.29	.25	.19	.15
141073	2182	1	T1 3/4	Incandescent lamp (1" lead wire)	.19/4.8	1	1.5	0.5	_	14 @ 80	.29	.25	.19	.15
141006	7361	2	T1 3/4	Incandescent lamp bi-pin base	.18/4.7	0.3	0.8	0.3	0.3	5 @ 60	.49	.39	.29	.19
27351	NE2	3	_	Neon lamp (req.150k Ω res. in series)	.197/5	1.2	1	0.38	_	65-120VDC @ 130-470mA/ 65-120VAC @ 150-500mA	.39	.29	.25	.19

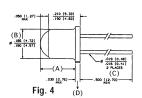
Infrared Diodes and Detectors

Infrared Diodes and **Visible Light Detectors**









•	use for	remote	COULLOI	OI III	per optic	S

• P/N 133946 can be used w/ cameras - see pg 156-158 (peak emission wavelength: 940nm @ IF 20mA)

172321		
	-	

Part	Product					Diameter	Dimensions (inches)		Dimensions (inches)						Pric	cing	
Number	Number	Color	Fig.	Description	Size	inch/mm	Α	В	С	D	Vf @ If (mA)	nm	mWatts	1	10	100	1000
112150	TLN100★	Infrared	1	Infrared diode	T1	.125/3	0.18	0.95	0.98	0.03	1.2V @ 20mA	940	1.2	\$.39	\$.29	\$.19	\$.12
112176	IRD300★	Infrared	1	Infrared detector	T1	.12/3	0.18	0.95	0.98	0.03	_	940	_	.39	.29	.19	.12
133946	SLI-0308CP	Infrared	1	Infrared diode lamp	T1	.12/3	0.22	0.98	1.00	0.03	1.7V @ 50mA	940	100	.75	.65	.49	.39
106526	TLN110★	Infrared	1	Infrared diode	T13/4	.200/5	0.34	0.78	0.84	0.04	1.6V @ 20mA	940	9	.45	.35	.25	.15
112168	IRD500★	Infrared	1	Infrared detector	T13/4	.200/5	0.31	1.05	1.10	0.04	_	940	_	.45	.35	.25	.15
120221	BPW77	_	2	Visible light detector	TO-18	_	0.24	0.19	0.52	_	_	800	_	2.19	1.95	1.75	1.55
172321	OP133	Infrared	4	Infrared emitter	TO-46	_	0.22	0.18	1.05	0.2	1.8V @ 100mA	935	5	2.49	2.25	1.95	1.75
124020	TP104	Infrared	3	Photo transistor	Rect.	0.16/4	0.09	0.45	0.45	0.16	_	850	_	.35	.29	.19	.12

We carry major manufacturers - call for large OEM pricing.

The general advantages of LED displays

LED Displays







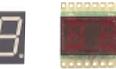


P/N 167126

(compared to incandescent types) are:

Soldering: • Soldering bath: not more than 5 seconds @ 260°C • Soldering iron: not more than 3 seconds @ 300°C under 30W





27545



• Lower power consumption • Longer lifetime (averaged more than 300,000 hours) • Compact size suitable for instrumentation and graphic representations









† PC board mounted

7 Seamont Displays

7-Segment Displays														
Part	Mfgs. New	Jameco's Old	Character	Illuminated	Buss	Pins/	Typical	Typical	Wavelength	Decimal			cing	
Number	Product Number	Product Number	Height	Color	Polarity*	Leads	Vf @ If (mA)	mcd@mA	nm	Point	1	10	100	1000
24731*	LSD3021-11	MAN71	.300"	Red	CA	11	1.9 @ 20	0.3 @ 20	697	RHDP	\$.99	\$.85	\$.69	\$.55
24740*	LSD3221-11	MAN72	.300"	Red	CA	11	2.1 @ 20	2.5 @ 20	697	LHDP	.89	.75	.65	.49
151976	LTS312AY	3005-03	.300"	Yellow	CA	11	2.8 @ 20	2.0 @ 10	585	LHDP	.89	.75	.65	.49
24782*	LSD3211-11	MAN74	.300"	Red	CC	10	2.1 @ 20	2.5 @ 20	697	RHDP	.89	.75	.65	.49
27545	NSN373	NSN373 †	.300"	Red	2-digit CC	16	1.7 @ 10	1.6 @ 20	660	_	.39	.35	.25	.12
17187*	LSD5051-11	CSS5103H1-21	.500"	Red	CC	10	2.1 @ 20	0.9 @ 20	697	RHDP	.89	.75	.65	.49
17208*	LSD5061-11	FND507	.500"	Red	CA	10	2.1 @ 20	0.9 @ 20	697	RHDP	.89	.75	.65	.49
104213	LSD5124-10	LTS5301R	.560"	Orange Red	CA	10	2.0 @ 20	2.4 @ 20	635	RHDP	.65	.55	.49	.45
24715*	LDD5121-20	CSD524H-22	.560"	Red	2-digit CA	18	2.1 @ 20	0.8 @ 20	697	RHDP	1.25	1.05	.89	.75
24723*	LDD5111-11	MAN6740	.560"	Red	2-digit CC	18	2.1 @ 20	0.8 @ 20	697	RHDP	1.25	1.05	.89	.75
24694	LDD5124	CSD524E-33	.560"	Orange Red	2-digit CA	18	2.0 @ 20	2.4 @ 20	635	RHDP	1.49	1.25	.99	.89
24707	LDD5114-20	CSD525E-63	.560"	Orange Red	2-digit CC	18	2.0 @ 20	2.4 @ 20	635	RHDP	1.49	1.25	.99	.89
18737*	LSD816-11	LTS3401LE	.800"	Orange Red	CA	13	1.6 @ 20	0.9 @ 20	655	RHDP	1.25	1.05	.79	.59
18753 *	LSD8151-10	LTS3405	.800"	Red	CC	13	2.1 @ 20	1.0 @ 20	697	LHDP	1.25	1.05	.79	.69
176559	C8021-1	_	.800"	Green	CC	13	2.0 @ 20	0.9 @ 20	568	RHDP	.99	.85	.69	.55
97172	LSD10061-10	CSS1014H	1.0"	Red	CA	10	2.1 @ 20	2.0 @ 20	697	RHDP	1.39	1.19	.89	.79
97199	LSD23265-10	CSS2314D	2.24"	Red	CA	10	1.7 @ 20	21 @ 20	660	RHDP	4.75	4.25	3.75	3.49
97201	LSD23255-10	CSS2315D	2.24"	Red	CC	10	1.7 @ 20	21 @ 20	660	RHDP	4.49	3.95	3.25	2.95
105591	LSD40054-20	CSS4013E	4.0"	Orange Red	CC	10	2.0 @ 20	1.8 @ 20	635	RHDP	9.49	8.29	7.49	6.49
Part Number	er Description	·			<u> </u>		·		·	·		·		Price
167126	Ligitek Pro	oduct Line CD-RO	OM (Phot	o above)										\$3.95

Dot Matrix Displays

Part	Mfgs. New		Character	Illuminated	Buss	Pins/	Typical	Typical	Wavelength	Decimal		Pr	icing	
Number	Product Number	Jameco Sockets	Height	Color	Polarity*	Leads	Vf @ If (mA)	mcd @ mA	nm	Point	1	10	100	1000
173833	HP5082-7300	_	.290"	Red	4x7 Hex character	8	5.0 @ 170	.03 @ 20	640	RHDP	\$7.95	\$6.95	\$6.25	\$5.59
32951	TIL311	37161	.300"	Red	4x7 Hex character	11	5.0 @ 5	0.1 @ 5	660	_	16.95	15.95	14.95	13.95
118906*	LTP747R	37161	.680"	Orange Red	5 x 7 AC/CR	12	1.7 @ 20	0.2 @ 20	655	_	3.49	2.59	1.59	1.35
183265	LMD5821ASR-20	101282	2.3"	Red	5 x 8 CC/AR	14	1.7 @ 20	12 @ 20	660	_	4.95	4.49	3.95	3.49

*CA-Common Anode / CC-Common Cathode • LHDP-Left Hand Decimal Point / RHDP-Right Hand Decimal Point • AC/CR-Anode Column/Cathode Row

LED Displays

The advantages of LED displays (compared to incandescent types) are:

- Lower power consumption Longer lifetime (averaged more than 300,000 hours)
- · Compact size, suitable for instrumentation and graphic representations
- Soldering: (bath) not more than 5 seconds @ 260°C; (iron) not more than 3 seconds @ 300°C under 30W
- * CA Common Anode / CC Common Cathode





152944



161509





161517 152979

7-Segment Displays

Part		Compatible with	Character	Illuminated	Buss	Pins/	Typical	Typical	Wavelength	Decimal		F	Pricing	
Number	Product Number	Jameco Sockets	Height	Color	Polarity*	Leads	Vf @ If (mA)	mcd @ mA	nm	Point	1	10	100	1000
152944	LA3051-16 (Ledtech)	37161	.300"	Red	CA	11	2.1 @ 20	0.8 @ 10	700	L/RHDP	\$.99	\$.89	\$.69	\$.59
161509	LN524YA (Panasonic)	101282	.430"	Yellow	2-digit CA	10	2.2 @ 20	0.6 @ 5	700	RHDP	.75	.65	.55	.45
161496	LN516YA (Panasonic)	101282	.560"	Yellow	CA	10	2.2 @ 20	0.8 @ 10	590	RHDP	.95	.85	.65	.55
161488	LN516YK (Panasonic)	101282	.560"	Yellow	CC	10	2.2 @ 20	0.8 @ 10	590	RHDP	.75	.65	.55	.45
152961	LA5621-11 (Ledtech)	101282	.560"	Green	CA	10	2.1 @ 20	2.9 @ 10	567	RHDP	.99	.89	.69	.59
161517	LN516RK (Panasonic)	101282	.560"	Red	CC	18	2.2 @ 20	0.6 @ 10	590	RHDP	.85	.75	.69	.59
152979	LC5641R-11 (Ledtech)	101282	.560"	Orange Red	CC	10	2.1 @ 20	3.3 @ 10	635	RHDP	.99	.89	.75	.65





Scott Edwards Serial LCD Modules

 Includes instruction codes for character generation, cursor control, printing, etc.

with BASIC Stamps, 80C52-BASIC controllers and PCs! (examples for stamps in PBASIC included) One-year warranty

16 characters x 2 lines Integrated Display

- Terminal style 1200-9600 bps serial input with 16-byte input buffer
 - 16L v1.00
- · Four inputs for switches/buttons that can be read via the serial connection
- · EEPROM storage of settings, six custom characters, and a text screen that can be automatically displayed at startup (splash screen)
- Serial control of the standard LED backlight
- Low current draw; 5mA (backlight off) to 40mA (backlight on and bright)
- Module size: 3.2"L x 2.0"W x 0.5"T Weight: 0.1 lbs. Part No. Description 10 150990 LCD module\$59.95 \$53.95 \$47.95

16 characters x 2 lines LCD Serial Backpack®

- High-contrast supertwist display
- Serial "backpack" accepts TTL at 2400 or 9600 bps
- RS232, or inverted CMOS,
- Power requirement: 4.8 5.5VDC @ 3mA Size: 3.1"L x 1.4"W
 Weight: 0.1 lbs.
- Part No. Description \$54.95 \$49.95 \$44.95 133129 LCD module

20 Characters x 4 Lines Graphics LCD

- 120x32 pixel graphics screen
- Terminal style 2400 or 9600 bps serial input
- EEPROM stores text
- font and 6 full-screen images
- Supports multiple fonts and font sizes
- Included utility program lets you create and download pictures and fonts
- Requires 9V battery or transformer recommend P/N 151095 (pg 82)
- Includes battery snap connectors, sample programs and user's manual on disk
- Module size: 3.1"L x 1.9"W x 0.8"T Weight: 0.3 lbs. Part No. Description 158166 20x4 serial LCD display......\$129.95 \$116.95

40 characters x 4 lines LCD Serial Backpack®

 High-contrast supertwist display with unique "big

character"



- mode prints 1" numbers and letters automatically
- Serial input at 1200, 2400, 4800 or 9600 bps
- Power requirement: 5VDC @ <10mA
- Module size: 7.5"L x 2.2"W
 Weight: 0.2 lbs.

Part No. Description 136485 40x4 serial LCD display..... .\$169.95 \$152.95

Point Sīx 16x4 **Parallel LCD Module**

- 16x4 character display (.78"H)
- · Character font: 5 x 8 dots
- Power requirement: 4.5V @ 2mA
- Input data: 40-bit or 8-bit interface available
- Display size: 2.4"L x 1.0"W x 0.06"T
- Module size: 3.4"L x 2.4"W x 0.25"T
 Wt.: 0.12 lbs.

Part No. Description 151933 16x4 parallel LCD ..\$19.95 \$17.95 \$14.95

Matrix Orbital 20 Characters x 4 Lines Serial LCD Display

Vacuum Fluorescent with Keyboard Interface

- 20 characters x 4 lines with large digits and bar graph mode
- Bar graphs, large digits multiple displays, software contrast control, auto line wrapping and scroll feature
- · Power off supply current: 9mA
- · Power requirements: 5VDC@275mA (typical)
- Serial input of 1200bps to 19,200bps (jumper selectable)
- Includes manual and software
- Display size: 2.8"L x .82"W
- Module size: 3.9"L x 2.4"W x 1.0"T

5	\$164.95	\$149.95
)	5	5 \$164.95

Matrix Orbital Serial LCD Module

- Backlight control, bar graphs, large digits, multiple displays, software contrast control. auto line wrapping, and auto scroll feature
- Serial input at 1200 to 19,200bps (jumper selectable)
- Connect 16 modules using the same 2 wire interface
- · Includes manual and software
- Power requirements: 5VDC@9mA
- Backlight supply current: 40mA typical
- Display size: 2.5"L x 0.7"W
- Module size: 3.2"L x 1.5"W x 0.8"T
- · Weight: 0.6 lbs.

Part No.	Description	1	10	25
174166	16 x 2 w/ interface	.\$59.95	\$54.95	\$49.95

Matrix Orbital 20x4 Serial LCD Modules

- · 20 characters x 4 line display with large digit mode
- Backlight control, bar graphs, large digits, multiple displays, software contrast control, auto line wrapping and auto scroll feature



150957

157323

- Backlight supply current: 90mA typical
- Serial input at 1200-19200bps (jumper selectable)
- Connect 16 modules using the same 2 wire interface
- · Includes manual and software
- Display size: 3.0"L x 1.0"W One-year warranty 150957: 20x4 Serial LCD Module

157323 Module w/ interface 109.95

- · Power requirements: 5VDC @ 10mA typical
- Module size: 3.9"L x 2.4"W x 0.7"T Weight: 0.9 lbs.

157323: 20x4 Serial LCD Module w/ keypad Interface

- · Power requirements: 5VDC @ 16mA typical
- Module size: 3.7"L x 2.4"W x 1.1"T Weight: 0.6 lbs. Part No. Description 10 150957 LCD module\$89.95 \$80.95 \$72.95

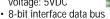
Log on today! www.jameco.com

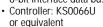
Ampire / Point Six LCD Parallel Displays

171715

- · Maximum input voltage: 5.3VDC
- Operating input







Character font size: 0.125"W x 0.200"H



171715: 16 Characters x 2 Lines • 14-pin/terminals Display size: 2.5"L x 0.7"W

Module size: 3.4"L x 1.2"W x 0.5"T

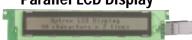
171723: 20 Characters x 2 Lines · 16-pin/terminals

Display size: 3.3"L x 0.7"W

Module size: 4.6"L x 1.5"W x 0.4"T

	0 0.E0. 110 E / 11.			
Part No.	Product No.	1	10	25
171715	AC162A	\$14.95	\$13.49	\$11.95
171723	AC202A	19.95	17.95	15.95

Optrex 40 Characters x 2 Lines Parallel LCD Display

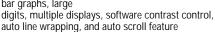


- · Maximum input voltage: 5.3VDC
- Interface between data bus line or 4-bit or 8-bit MPU available
- Character font: 5 x 7 dots Weight: 0.2 lbs.
- Display size: 6.4"L x 0.7"W x 0.2"T
- Module size: 8.4"L x 1.7"W x 0.4"T

Part No. Description 10 166983 40x2 parallel LCD ...\$24.95 \$22.49 \$19.95

Matrix Orbital Graphics LCD 40 characters x 8 lines Maximum

- 40 characters x 8 lines maximum display with 5 x 7 font
- Backlight control, bar graphs, large



- Backlight supply current: 160mA typical
- Power requirements: 5VDC@31mA typical
- Pixel layout: 240 x 64 pixels
- Serial input: 1200 to 19200bps (jumper configurable)
- · Includes manual and software
- Display size: 5.2"L x 1.5"W Weight: 0.9 lbs.
- Module size: 7.1"L x 2.6"W x 0.7"T

Part No. Description 174182 Graphics display .. \$199.95 \$179.95 \$162.95

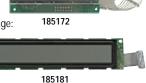
Data Image Parallel LCD Displays

20 Characters x 2 Lines

- · LCD type: STN gray, reflective
- Character font: 5 x 8 dots

voltage:





13.5V maximum Viewing angle: 70-90°

Input data: 8-bit • 185172: Size (module): 3.5"L x 1.4"W x 0.25"T

• 185181: Size (module): 7.1"L x 1.6"W x 0.25"T Part No. Product No. Wt. (lbs.) **185172** CXM20211SR 0.1....\$22.95 \$19.95 \$17.95 185181 CM2021 0.2.....24.95 22.49

JAMECO® LCD Serial Display

- · Terminal style serial input
- · Character display type
- · 20 characters x 4 lines
- · White EL backlight
- · Low power 3V design
- 5 x 8 dot matrix
- · Super twisted nematic display
- · Gray display color mode
- Size: 3.5"L x 2.0"W x 0.3" Thick Weight: 0.1 lbs.

Description Part No. 10 LCD module......\$69.95 \$62.95 \$56.95

JAMECO° 0.6" High 3½-Digit **LCD Digital Panel Meters**

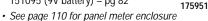
108388

146835

123140

108388 / 146835:

- Single 9VDC operation
- Maximum input: 199.9mVDC
- · Maximum display: 1999 counts
- Accuracy: ±0.5%
- · Automatic polarity indication
- Input impedance: $>100M\Omega$
- Size: 2.7"L x 1.7"W
- · Weight: 0.1 lbs.
- 175951: Includes bezel
- 146835: Backlit display
- · Includes bezel
- **123140**: Supply voltage:
- 9-12VDC recommend P/N
- 151095 (9V battery) pg 82



Part No.	Description	1	10	25
108388*	3.5 LCD DPM	\$14.95	\$13.49	\$11.95
175951	3.5 LCD DPM	12.95	11.95	10.95
146835	3.5 LCD (Backlit)	17.95	15.95	13.95
123140	4.5 LCD DPM	27.95	24.95	22.49

TRISYS Serial LCD Interface Module

For Parallel LCD Displays with Hitachi 4480 Chipset

- Supports 1x8 up to 4x20 LCD display formats
- · Provides word wrap, control character processing for display blanking, cursor blanking, up-down-left-right cursor controls
- Size: 1.5"L x 1.0"W Weight: 0.02 lbs.

Рап по.	Description		10
157981	LCD serial interface module	\$22.95	\$19.95

Micro Electronics LCD Dot Matrix **Graphic Display**

- · 128 x 64 dot matrix display
- · Display can be programmed to create a variety of sizes
- · STN yellow green mode
- · Operating voltage: 5V @ 1mA
- · Operating current: .8mA on display mode and 1A on access mode (low power
- consumption)
- · 180° viewing angle
- Built-in LCD driver IC: KS0708
- · Easy interface with 8-bit MPU
- Size (module): 3.0"W x 2.0"H x 0.1"T
- Size (viewing area): 2.8"W x 1.6"H Weight: 0.1 lbs.

Description

163176 Dot matrix graphics display ... \$49.95 \$44.95

VL 0.5" 31/2 & 4-Digit Field Effect LCD Displays

8.8:8.8

- · Compatible with socket P/N 101282 (2) (pg 60)
- Pin spacing: 0.1" centers
- 40-pin package (no connector required)
- Size: 2.0"L x 1.2"H x 0.1"D

17110: 4-Digit LCD

· Digital multimeters, thermometers, pressure gauges, timers, clocks (12 or 24 hour format) and frequency counters

32230: 3½-Digit LCD

- Digital voltmeters, thermometers, pressure gauges, timers, clocks
- Can be used with Intersil's 7106CPL (P/N 43748, pg 11) Part No. Description

4-digit LCD w/ pins\$8.95 \$7.95 \$6.95 3½-digit LCD w/ pins8.95 7.95 6.95

Futaba 0.5" Blue Green Fluorescent Display

- 4-digit vacuum fluorescent display
- 10 bar indicators and a colon indicator
- Size: 3.9"L x 1.6"H x 0.8"W (leads: .75" long)



Monarch Industrial Panel Meter

(0 to 1mA DC)

- · Low cost, high quality
- · Basic DC accuracy to 0.3%
- · UL recognized
- · Direct replacement for: Yokogawa, Modutec, Jewell, WPIC, Hoyt, Crompton, Brighton • Size: 1.5"L x 1.7"W x 1.7"H
- TB = Taut Band
- Depth: 1.2" · Weight: 0.2 lbs.

Part No.	Product No.	DC Ranges	1	10
171897	PMG6S	0 – 1mA (TB)	\$9.95	\$8.95

PARALLAX 7 Plus Pack App Kit

The new BS2P-IC "Plus Pack" includes all the parts you need to learn the BŠ2P-IC's new features relating to Dallas Semiconductor's iButton, I2C protocol, and parallel LCDs. The kit includes complete



documentation showing how to design well-written code for each component.

· Includes (2) Dallas Semiconductor 1822 "One Wire" thermometers, (1) Dallas Semiconductor 2404 "One Wire" real time clock, (1) Microchip I2C 24LC32 EEPROM, (1) Phillips I2C PCF8591 8-bit A/D converter, and 2x16 supertwist non-backlit parallel LCD with header • Weight: 1.0 lb.

Part No. Parallax No. 27953.....**\$58.95**

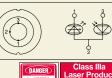
Information at Your Fingertips

Log on to our web site for specials, technical tips and expanded product information

www.jameco.com

650nm Orange Red Laser Diode

- Pin Connection: 1. Laser Diode Cathode 2.Laser Diode Anode Photodiode Cathode
- 3. Photodiode Anode



126244

- Optical output power: ≤5mW maximum
- Operating current: 30mA
- Operating voltage: 2.6V maximum
- Lasting wavelength: 650nm typical
- 5.6mm packaging size
- Beam divergence of 11 degrees from center line maximum Compatible with collimating lens
- (P/N 126244) and driver (P/N 161736 below)
- One-year warranty

Part No. Description 650nm laser diode....\$19.95 \$17.95 \$15.95 182932

Laser Diode Accessories

126244: Collimating lens

· Assembly instructions:



- · Weight: 0.02 lbs.
- One-year warranty
- 161736: Laser driver w/ regulator Input voltage: 2.6-6VDC
- Input current: 40mA
- Six-month warranty
- 161736 Part No. Description 10 126244 Collimating lens\$5.95 \$5.49 \$4.95 161736 Laser driver6.95 6.25

670nm Red Laser Diode Module

- Operates on 3VDC @ <5mW
- 670nm wavelength
- · Beam diameter: 3.2mm
- · Working distance: over 50 meters/yards (daylight) 200 meters/yards (dark)
- Size: 0.8"L x 0.4"Dia
- · Weight: 0.02 lbs. · One-year warranty

Part No. Description

131203 Laser module, brass......\$39.95 \$35.95

3-Element Glass Lens Class IIIa Laser Product **Red Laser Module**

This lens design uses 3-element glass to collect almost all the power from the laser diode resulting in a



brighter spot than many typical laser applications. Operating voltage: 4.0-6.0VDC (P/N 112070 pg 88)

Line Generating Lens

- Wavelength: 660nm
 Maximum output: 4mW
- · Beam size at 7m: oval 5mm x 8mm
- Beam divergence: 0.2mrad
- Module size: 2.0"L x 0.5"W Weight: 0.1 lbs.
- · Green LED indicator · One-year warranty

Part No Description 133292 3-element glass laser \$44.95 \$39.95

For use w/ laser module 133292 (above)

- Adjustable focus range: 50 cm to ∞ Focal length: 8.0mm
- · Back focal length: 1.5mm · Beam divergence: 2.0mrad
- Lens construction: 3E.3G (glass)
- Screws onto module (P/N 133292 above) easily Weight: 0.01 lbs.
 Six-month warranty

• Length at 1 m distance: 1.70 m Fan angle: 60° Part No. Description

134148 60° generating lens \$13.95 \$12.49 \$10.95





Fiber Optic Designer's Kit

Simplex Kit

This "active link" requires a single +5-volt power supply (recommend part no. 164101, pg. 81) and interfaces



with all TTL/CMOS logic. It includes 32' (10m) of 1000µm plastic optical cable; efficient dry, non-polish connectors (4), bulkhead interfaces (2), and splices (2); integrated detector (1) and emitter (1); and top-quality printed wiring boards (2). Full instructions and technical data sheets complete the package. • Weight: 0.5 lbs. Part No. Description

	169893 F	Fiber Optic Kit\$79.	95	\$71.95
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This 68-page experiment guide contains nine fascinating fiber optics experiments. The kit contains



all the fiber optic and electronic components required to complete the experiments in the Lab Course manual.

Experiments

- Making a light guide Fiber optic cable transmission
- Characteristics of connectors and splices
- Index-matching procedures Fiber optic transmitter
- Speed of opto-electronic devices
 Receiver design
- Fiber termination techniques Weight: 0.7 lbs.

Part No. Description 169914 Lab Course and Lab Kit......\$49.95 \$44.95

9.8' Optical Voice Link Kit

The Optical Voice Link is the ideal introduction for those first learning about the science of light transmission through 9.8' optical fiber.



• 9V battery required • Weight: 0.6 lbs.

Part No. Description 169922 9.8' Optical Voice Link Kit....\$49.95 \$44.95

5 Piece Glass Lens Assortment

An assortment of five high-quality glass lenses designed for optical experiments. Includes at least one each of doubleconcave, double-convex and concave-convex lens.



Description 170026 5 Piece Lens Assortment\$9.95

5 Piece Glass Mirror Assortment

Five assorted-size high-quality, multipurpose first-surface, glass substrate mirrors excellent for many optical

Part No.



experiments. Mirror surfaces are protected with a removable film to prevent scratching during shipping. • No two assortments are identical

· Size: Exceed 4"sq. · Weight: 0.7 lbs.

Description 5 Piece Mirror Assortment \$9.95 \$7.95 170000

Fiber Optic Tool Kit

Kit contains fiber optic stripper, 25w hot knife (UL approved), professional fiber cutter, water dispenser, rubber pad. 600 grit and 3µm polishing film,



replacement blades, ST (connector type) fiber polishing puck, rugged storage container and instruction booklet.

· Weight: 2.5 lbs

Part No. Description 170034 Fiber Optic Tool Kit.......\$149.95 \$134.95

Educational Communication Kit

3' Optical Fiber Cable

It's a great hands-on educational product as well as an opportunity for the serious investigator/experimenter to explore fiber optic technology. This 3' digital link can also be used to construct high-voltage

isolation for telephones, modems and computers. · Weight: 0.2 lbs.

Part No.	Description 1	10
169906	Ed. Communication Kit\$19.95	\$17.95

3 Piece Glass Prism Assortment

Three assorted-size high quality glass prisms. Excellent for many optical experiments. Includes right-angle, dove, equilateral and pentra prisms. No two assortments are identical.

• Size: Exceed 3/8" per side • Weight: 0.2 lbs. Part No. Description

3 Piece Prism Assortment ... \$19.95 \$17.95 170018

Fiber Optic Polarizing Film Use with Visible and Near Infrared Light

Extinction ratio is greater than .01%. Useful for reducing glare, doing optical experimentation, and increasing contrast in sensors. Easily cut, punched or drilled and is resistant to heat, impact and abrasion.



169981

• Size: 2"L x 2"W · Weight: 0.02 lbs.

Part No. Description Polarizing film.....

Fiber Optic Photologic Detectors Infrared

Mates with standard 1000µm core jacketed plastic fiber cable



Internal micro-lens

for efficient coupling

- Inexpensive plastic connector housing
- Connector-less fiber termination and connection
- · Interference-free transmission from light-tight housing
- No optical design required
- Compatible with LED emitters above 169990: • TTL compatible output
- Peak wavelength sensitivity: 800nm
- 169981: TTL open-collector output · Peak wavelength sensitivity: 850nm

Part No.	Description	Color Dot	1	10
169990	Photologic Detector D	95T yellow \$5	.95	\$4.95
169981	Photologic Detector D	96 white 6	5.95	5.95

Fiber Optic NPN **Phototransistor Detector**

Infrared

- Mates with standard 1000µm core jacketed plastic fiber cable
- No optical design required
 - Simple PWB mounting
- Rugged screw attachment
- · Wavelength: 870nm
- · Internal micro-lens for efficient coupling
- · Inexpensive plastic connector housing
- · Connector-less fiber termination and connection
- Interference-free transmission from light-tight housing
- V_{CEO}: 30V • I_C: 50mA • 100mW max.
- Excellent linearity

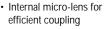
· Compatible with LED emitters below

Part No. Description White\$4.95 **169973** Phototransistor D92 \$4.49

Fiber Optic LED Emitters

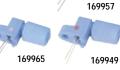
Infrared and Visible Light

 Mates with standard 1000µm core jacketed plastic fiber cable









- Interference-free transmission from light-tight housing
- · No optical design required
 - · Excellent linearity
- Compatible with above fiber optic photo detectors 169957:
- Peak wavelength: 950nm, Vf=1.7mA max @ 50mA 169949 & 169965:
- Peak wavelength: 660nm, Vf=1.8mA max @ 50mA

Part No.	Description	Color Dot	1	10
169957	Fiber optic LED E91A	blue\$4.9	95	\$4.49
169965	Fiber optic LED E96	pink5.3	35	4.95
169949	Fiber optic LED E97	red6.4	19	5.95

10' Fiber Optic Cable & Splices

173075

171272

• 1000µm core jacketed plastic fiber optic cable (10') 173075: • Enough to make 10 splices on

1000µm fiber optic cable

Part No.	Description 1	10
171272	10' fiber optic cable\$6.95	\$6.25
173075	LC splice kit (10)6.95	6.49

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5mm Ceramic Trimmer Capacitor

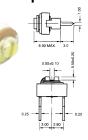
· Working voltage: 200VDC



· Turning torque: 35~200 g/cm

· Operating temperature range: -30°C~+85°C

· Insulation resistance: $>10M\Omega$ min. @ 250VDC



Part	Capacitance						
Number	Range (pf)	@ 1MHz	Codes	1	10	100	1000
136979	9.0-50.0	> 200	Green	\$.49	\$.39	\$.29	\$.19

8mm .315" Ceramic Trimmer Capacitors (250WVDC) Thru Hole

· Working voltage: 250VDC

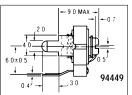
· Withstand voltage: 550VDC

· Turning torque: 40~200 g/cm

Operating

temperature range: -55°C~+85°C

· Insulation resistance: $10M\Omega$ min. @ 250VDC

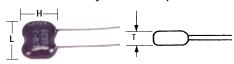




Part	Capacitance	Q Factor	Color		Pri	cing	
Number	Range (pf)	@ 1MHz	Codes	1	10	100	1000
134818	3.5–13.0	> 300	Ivory	\$.49	\$.39	\$.29	\$.19
32838*	4.0–34.0	> 300	Yellow	.99	.79	.59	.39
32854*	6.0–70.0	> 200	Nil	.99	.79	.59	.39
94449*	8.5–100	> 200	Purple	.99	.79	.59	.35
94465*	8.5–120	> 200	Nil	.99	.79	.59	.39

Dipped Silver Mica Capacitors (±5%)

Metalized Polyester Film Capacitors



Capacitor size and lead spacing may vary

	• •
Case type	DM15
Lead space (in.)	.23
Tolerance	± 5%
Operating temperature range	-55°C to +125°C
Size (mm) – L x T x H (may vary)*	11 x 4 x 9

Part	Product				Pri	cing	
		Capacitance	Voltage	1	10	100	1000
15991	DM100	10p <i>f</i>	500V	\$.49	\$.39	\$.29	\$.25
16037	DM220	22p <i>f</i>	500V	.45	.35	.25	.19
16070	DM330	33p <i>f</i>	500V	.45	.35	.25	.19
16096	DM470	47p <i>f</i>	500V	.45	.35	.25	.19
16002	DM101	100p <i>f</i>	500V	.45	.35	.25	.19
16088	DM331	330p <i>f</i>	500V	.59	.49	.29	.25
16109	DM471	470p <i>f</i>	500V	.65	.55	.49	.39
16011	DM102	1000p <i>f</i>	100V	.85	.75	.65	.55

Memory Back-Up Capacitors

Features:

Excellent voltage holding characteristics for low back-up currents

Small size vs. capacitance

Capacitance ranges from .047 to 1f • Voltage: 5.5VDC

Applications:

Back-up on CMOS microcomputers, static RAM, DTSs (digital tuning systems)

Memory back-up of remote controllers

Capacitor dimensions and lead spacing may vary

		Cap.	Pricing			
Part No.	Product No.	(Farad)	1	10	100	
142922	MBC.047/5.5	.047	\$1.75	\$1.49	\$1.25	
142949	MBC.22/5.5	.22	1.95	1.75	1.25	
143010	MBC.47/5.5	.47	2.95	2.75	1.95	
142957	MBC1.0/5.5	1.0	3.95	3.49	2.95	

— w−

Monolithic Ceramic Capacitors (±20%) **Ceramic Epoxy Dipped (Z5U Series)**

Any Monolithic Ceramic Capacitor may be supplied in ammo style tape by special order - 1000 piece minimum

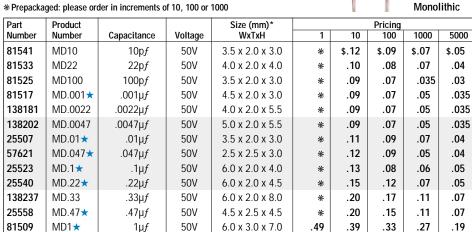
Applications:

· Data processing · Communications engineering

Operating temperature range: -10°C to +85°C

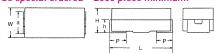
* Capacitor dimensions and lead spacing may vary

* Prepackaged: please order in increments of 10, 100 or 1000



Resin Molded Chip Tantalum Electrolytic Capacitors (±20%)

Any surface mount Tantalum Chip Capacitor may be special ordered - 2000 piece minimum.



Case Size (Dimensions in mm)

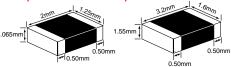
						,
EIA	L	W	Н	P	a	
CASE CODE	±0.2	±0.2	±0.2	±0.3	±0.2	h(min)
A (3216)	3.2	1.6	1.7	0.8	1.2	0.7
B (3528)	3.5	2.8	1.9	0.8	2.0	0.7
C (6032)	6.0	3.2	2.5	1.3	2.0	1.0
D (7343)	7.3	4.3	2.9	1.3	2.4	1.0

	10V SMT Tantalum					Pricing per each		
87020 10μf B \$1.09 \$.99 \$.89 — \$		Canaditana	C Ci		F00			
	Number	Сараспансе	Case Size	increments	100	500	500	2000
	87020	10μ <i>f</i>	В	\$1.09	\$.99	\$.89	_	\$.79
87118 $100\mu f$ D $1.19 1.0999 - $	87118	100μ <i>f</i>	D	1.19	1.09	_	.99	_

16V SMT Tantalum					Pricing per each		
Part Number	Capacitance	Case Size	10 pc. increments	100	500	OEM 500	reels 2000
86932	1μ <i>f</i>	Α	\$.99	\$.89	\$.79	_	\$.69
87038	10μ <i>f</i>	С	.89	.79	_	.69	_
87100	47µ <i>f</i>	D	2.19	1.95	_	1.75	_

Multilayer Ceramic Chip **Capacitors (Surface Mount)**

Any surface mount Ceramic Chip Capacitor may be special ordered - 3000 piece minimum.



0805 SMT CASE

1206 SMT CASE

X7R SERIES (±10%)

0805 SMT Case					Pricing per each		
Part			100 pc.			OEM	reels
Number	Capacitance	Voltage	increments	500	1000	3000	5000
87311	.01µ <i>f</i>	50	\$.19	\$.15	\$.11	_	\$.07
87370	.1µ <i>f</i>	25	.20	.17	.12	.08	_

1206 SMT Case					Pricing per each		
Part			100 pc.			OEM	
Number	Capacitance	Voltage	Increments	500	1000	3000	5000
87329	.01µ <i>f</i>	50	\$.15	\$.13	\$.11	_	\$.09
87388	.1µ <i>f</i>	50	.19	.17	.15	.11	
87396	.22µ <i>f</i>	25	.25	.22	.19	.15	_

Z5U SERIES (±20%)

0805	SMT Ca	se	Pricing per each						
Part Number	Capacitance	Voltage	100 pc. increments	500	1000	OEM reels 5000			
87177	.1µ <i>f</i>	50	\$.12 \$.07 \$.05 \$.03						
1206	SMT Ca	se	Pricing per each						

1206	SIVIT Ca	se	per each			
Part			100 pc.		OEM reels	
Number	Capacitance	Voltage	increments	500	1000	5000
87185	.1µ <i>f</i>	50	\$.15	\$.13	\$.11	\$.09
87206	.22µ <i>f</i>	50	.10	.09	.07	.05
87222	.47µf	50	.25	.22	.19	.15

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Miniature Aluminum Radial Electrolytic Capacitors

General purpose low volt. 85°C (A); HT Type 105°C (B) ±20%



Operating temperature	range	-40°C to +85°C (A); -40°C to +105°C (B)			
Leakage Current	After 1 min.	0.03CV or 4µA, whichever is greater			
(20°C)	After 2 min.	0.01CV or 3μ A, whichever is greater			

RADIAL CAPACITOR CROSS REFERENCES

Elna: RC2/RE2; IC: RAR/RSS; Marcon: SEM/SSM; Nichicon: LB/VX/USA/SR/SA; Rubycon: MS7/TWSS; Sprague: 501D/513D; UCC: SME/SRE/SRA/SRG; Panasonic: KA/KS/SU

* Capacitor dimensions and lead spacing may vary

* Prepackaged: please order in increments of 10, 100 or 1000

* Prepackaged: please order in increments of 10, 100 or 1000									
Part Number	Product Number	Op. Temp	Value (µf)	Voltage	Size (mm)* DxH	1	Pric 10	ing 100	1000
158481	R0.47B100	В	0.47	100V	5x11.5	<u>_</u>	\$.07	\$.05	\$.035
94160	5R1/50	A	1	50V	4x5	*	.13	.10	.08
29831	R1/50*	A	1	50V	5x11	*	.04	.03	.025
158490	R1B100	В	1	100V	5x11.5	*	.09	.06	.04
93729	R2.2/50	A	2.2	50V	5x11.5	*	.04	.03	.025
135183	R3.3/50	A	3.3	50V	5x11	*	.055	.045	.035
31000	R4.7/50	A	4.7	50V	5x11	*	.04	.03	.025
158511	R4.7B100	В	4.7	100V	5x11.5	*	.065	.045	.03
94211	5R10/25	A	10	25V	4x5	*	.14	.11	.09
94220	5R10/35	A	10	35V	5x5	*	.15	.12	.09
94369	7R10/35	A	10	35V	5x7	*	.10	.06	.04
29891	R10/50*	A	10	50V	5x10	*	.04	.03	.025
158529	R10B100	В	10	100V	6x11.5	*	.09	.06	.045
158326	R22B35	В	22	35V	5x11.5	*	.07	.05	.035
93737	R22/50	A	22	50V	6x11	*	.06	.05	.035
93745	R33/50	A	33	50V	6x11	*	.07	.06	.035
135301	R47/10	A	33 47	10V	5x12	*	.03	.015	.04
93753	R47/10	A	47	25V	6x7	*	.03	.013	.025
158246	R47/25	B	47	25V 25V	5x11.5	*			.025
31114	R47/50*	A	47	50V	6x11	*			.035
94289	5R100/16	A	100	16V	6x11	*	.15	.05 .12	.045
94431	7R100/16	A	100	16V	6x7	*	.13	.09	.09
93761	R100/16	A	100	25V	6x11	*	.09	.07	.07
29962	R100/50	A	100	50V	8x11	*	.07	.06	.05
158393	R100/50 R	B	100	50V	8x12	*	.12	.09	.03
135124	7R220/10	A	220	10V	8x11	*	.12	.07	.07
30496	R220/10	A	220	25V	8x11	*	.09	.07	.05
158262	R220B25	B	220	25V 25V	8x12	*	.12	.07	.03
93770	R220B25	A	220	35V	10x16	*	.12	.09	.07
93778	R220/50	A	220	50V	10x10	*	.15	.12	.08
158406	R220B50	В	220	50V	10x20 10x17	*	.19	.15	.12
93796	R330/25	A	330	25V	10x17 10x19	*	.15	.13	.08
93809	R470/16	A	470	16V	10x19 10x20	*	.13	.09	.08
158203	R470/16	B	470	16V	8x12	*	.12	.10	.08
31181	R470616	A	470	25V	10x16	*	.13	.10	.09
158289	R470/25 X	В	470	25V	8x14	*	.15	.10	.10
93817	R470B25	A	470	35V	12x24	*	.15	.12	.10
93817	R470/35 R470/50	A	470	50V	12x24 18x15	.29	.17	.15	.13
158465	R470/50	B	470 470	63V	13x21	.29	.25	.25	.12
30015		А			_		.34	.25	.15
	R1000/16*		1000	16V	13x21	*	-		
93833	R1000/25	A	1000	25V	12x20	* 2E	.23	.19	.15
158297	R1000B25	В	1000	25V	10x17	.35	.29	.25	.19
158377	R1000B35	В	1000	35V	13x21	.39	.35	.29	.25
93841	R1000/50	Α	1000	50V	16x26	.52	.42	.37	.31

Capacitors continued on top right column

Miniature Aluminum Radial Electrolytic Caps (Continued) General purpose low volt. 85°C (A) standard size; HT Type 105°C (B) ±20%

Part	Product	Op.	Value		Size (mm)*	Pricing			
Number	Number	Temp	(μ <i>f</i>)	Voltage	DxH	1	10	100	1000
133145	R2200/16	Α	2200	16V	16x26	\$.39	\$.29	\$.25	\$.19
30533	R2200/25*	Α	2200	25V	16x36	.45	.39	.35	.25
158431	R2200B50	В	2200	50V	16x31	.89	.75	.59	.49
30891	R3300/25	Α	3300	25V	16x31	.69	.59	.49	.39
93850	R4700/25	Α	4700	25V	18x35	.79	.69	.59	.49
163301	R4700/50	Α	4700	50V	22x42	1.75	1.49	1.25	1.09
31510	R6800/16	Α	6800	16V	18x36	1.09	.99	.79	.69

Miniature Aluminum Axial Electrolytic Capacitors General purpose low voltage 85°C (A) standard size (±20%)



Operating temperature range	-40°C to +85°C (A)
Leakage Current (After 2 minutes 20°C)	0.02CV or 2µA, whichever is greater

AXIAL CAPACITOR CROSS REFERENCES

Elna: RE2; IC: RAR; Marcon: SEM; Nichicon: LB/VX; Rubycon: TWSS;

Sprague: 501D/513D; UCC: SME; Panasonic: SU * Capacitor dimensions and lead spacing may vary

* Prepackaged: please order in increments of 10, 100 or 1000

Part	Product	Op.	Value		Size (mm)*		Pric	ina	
Number	Number	Temp	(μ <i>f</i>)	Voltage	DxH	1	10	100	1000
10866	A1/50★	Α	1	50V	5x13	*	\$.15	\$.12	\$.09
93569	A2.2/50	Α	2.2	50V	6x13	*	.15	.10	.075
11076	A4.7/50★	Α	4.7	50V	6x13	*	.15	.12	.09
93577	A10/35	Α	10	35V	6x13	*	.15	.12	.09
10882	A10/50★	Α	10	50V	6x12	*	.15	.12	.09
158836	A10A63	Α	10	63V	6x13	*	.15	.12	.075
10997	A22/50★	Α	22	50V	6x12	*	.15	.12	.09
135319	A47/25	Α	47	25V	8x16	*	.12	.08	.05
11105	A47/50★	Α	47	50V	8x16	*	.15	.12	.09
147221	A68/25	Α	68	25V	8x17	*	.15	.12	.09
93551	A100/35	Α	100	35V	8x16	*	.19	.15	.10
10911	A100/50★	Α	100	50V	8x20	*	.25	.19	.15
11017	A220/50★	Α	220	50V	10x20	.29	.25	.19	.15
54287	A470/16	Α	470	16V	10x26	*	.12	.08	.065
11121	A470/50★	Α	470	50V	13x31	.59	.49	.45	.39
93631	A1000/16	Α	1000	16V	13x27	.45	.39	.32	.25
10954	A1000/25*	Α	1000	25V	13x31	.59	.49	.39	.29
93649	A1000/35	Α	1000	35V	13x26	.69	.59	.45	.35
147256	A1000/50	Α	1000	50V	16x31	.79	.69	.59	.49
11033	A2200/16	Α	2200	16V	16x40	.49	.39	.35	.25
93657	A2200/35	Α	2200	35V	16x30	1.09	.99	.89	.75
93665	A3300/25	Α	3300	25V	16x32	.89	.79	.69	.59
93673	A4700/25	Α	4700	25V	22x39	1.49	1.25	.99	.75
158810	A4700A50	Α	4700	50V	25x43	2.49	2.25	1.95	1.75
93681	A10000/16	Α	10000	16V	22x51	1.95	1.75	1.49	1.25

Dipped Tantalum Capacitors (±10%)

Resin Dipped Solid Tantalum Capacitors

- Flame retardant coating Exceptional temperature stability
- Low leakage current impedance Moisture-resistant
- Designed for entertainment and commercial equipment

· Capacitor dimensions and lead spacing may vary

Operating temp. range	-55°C to +85°C (+125°C with derating)
Rated voltage DC	≤ + 85°C

DIPPED TANTALUM CAPACITOR CROSS REFERENCES

Panasonic: EF Series; AVX: Tap Series; Sprague: 196D and 199D; Kemet: T350/ T360; Mepco: 49GS; NEC: DN; Nichicon: 599; NIC: NDTM; Hitachi: TSD-3; Matsuo: 202

* Preparkaged: please order in increments of 10, 100 or 1000

	* Prepackagea: please order in increments or 10, 100 or 1000									
Part	Product			Size (mm)		Pric	cing			
Number	Number	Capacitance	Voltage	DxH	1	10	100	1000		
33486	TM.1★	.1µ <i>f</i>	35V	4.5x7	*	\$.22	\$.19	\$.15		
33507	TM.22	.22µ <i>f</i>	35V	4.5x7	*	.19	.15	.13		
33523	TM.33	.33µ <i>f</i>	35V	4.5x7	*	.19	.15	.13		
33531	TM.47★	.47µ <i>f</i>	35V	4.5x7	*	.19	.15	.13		
154860	TM1/25	1μ <i>f</i>	25V	3x6	*	.25	.23	.19		
33662	TM1★	1μ <i>f</i>	35V	4.5x7	*	.28	.24	.21		
94001	TM2.2/16	2.2µ <i>f</i>	16V	4.5x7	*	.19	.15	.13		
94019	TM2.2/25	2.2µ <i>f</i>	25V	4.5x7	*	.25	.22	.19		
33734	TM2.2★	2.2µ <i>f</i>	35V	4.5x7.5	.33	.29	.25	.22		
33769	TM3.3	3.3µ <i>f</i>	35V	4.5x7.5	.45	.35	.29	.25		
94035	TM4.7/16	4.7µ <i>f</i>	16V	4.5x7.5	.33	.29	.25	.22		
94043	TM4.7/25	4.7µ <i>f</i>	25V	5x8.5	.39	.35	.29	.25		
33806	TM4.7★	4.7µ <i>f</i>	35V	5.5x9	.42	.38	.31	.27		
33873	TM6.8	6.8µ <i>f</i>	35V	6x10	.45	.39	.29	.25		
94060	TM10/16★	10μ <i>f</i>	16V	5x9	.29	.25	.22	.19		
94078	TM10/25	10μ <i>f</i>	25V	5.5x9	.49	.39	.35	.31		
33689	TM10★	10μ <i>f</i>	35V	6x10	.71	.61	.51	.46		
33718	TM15	15µ <i>f</i>	25V	6x10	.59	.49	.45	.39		
33751	TM22	22µ <i>f</i>	6.3V	5x9	.45	.35	.31	.27		
94094	TM22/16★	22µ <i>f</i>	16V	6x10	.51	.42	.37	.33		
94107	TM22/25	22µ <i>f</i>	25V	7x10.5	1.19	1.09	.99	.89		
33785	TM33★	33µ <i>f</i>	25V	8x13	1.19	1.09	.99	.89		
94123	TM47/16	47µ <i>f</i>	16V	8x13	1.19	1.09	.99	.89		
33822	TM47★	47µ <i>f</i>	25V	9x14.5	1.75	1.55	1.45	1.35		
33700	TM100	100μ <i>f</i>	6.3V	7x10.5	1.19	1.09	.99	.89		

Ceramic Disc Capacitors (±20%)

25, 50, 500 and 1000 Volt, Z5U Temperature Coefficient

Any Ceramic Disc Capacitors may be supplied in ammo-style tape by special order – 1000 piece minimum

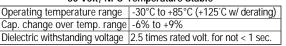
Capacitor dimensions and lead spacing may vary

* Prepackaged: please order in increments of 10, 100 or 1000

Operating temperature range	+10°C to +85°C
Cap. change over temp. range	+22% to -56%
Dielectric withstanding voltage	2.5 times rated volt. for not < 1 sec.

ж т териске	igeu. piease orue	i ili ilici cilicii	13 01 10,	100 01	1000				
Part	Product			Dia.			Pricing		
Number	Number	Capacitance	Voltage	(mm)	1	10	100	1000	5000
135141	DC2.2	2.2p <i>f</i>	50V	5	*	\$.09	\$.07	\$.03	\$.02
15333	DC10	10p <i>f</i>	50V	5	*	.05	.035	.02	.015
15405	DC22	22p <i>f</i>	50V	6	*	.05	.035	.02	.015
15510	DC47	47p <i>f</i>	50V	5	*	.05	.035	.03	.02
15341	DC100★	100p <i>f</i>	50V	5	*	.05	.035	.02	.015
15413	DC220	220p <i>f</i>	50V	5	*	.05	.035	.03	.015
15528	DC470	470p <i>f</i>	50V	5	*	.05	.035	.03	.015
15190	DC.001★	.001µ <i>f</i>	50V	6	*	.05	.035	.02	.015
97341	DC.0022/1K20	.0022µ <i>f</i>	1000V	11	*	.15	.10	.06	.04
15211	DC.0047	.0047µ <i>f</i>	50V	6	*	.05	.035	.03	.02
15229	DC.01★	.01µ <i>f</i>	50V	6	*	.05	.035	.02	.015
97375	DC.01/1K20	.01µ <i>f</i>	1000V	12	*	.15	.10	.06	.04
15245	DC.022	.022µ <i>f</i>	50V	8	*	.07	.05	.04	.03
15253	DC.047	.047µ <i>f</i>	50V	8	*	.07	.05	.04	.03
151116	DC.1/25	.1µ <i>f</i>	25V	6	*	.12	.08	.06	.04





- Capacitor dimensions and lead spacing may vary
- * Prepackaged: please order in increments of 10, 100 or 1000



High Voltage 50VDC Ceramic

Part	Product			Dia.	Pricing				
Number	Number	Capacitance	Voltage	(mm)	1	10	100	1000	
97261	DC100/1K5	100p <i>f</i>	50V	7	*	\$.15	\$.12	\$.09	

Mylar Capacitors (±10%)

Metallized Polyester Film Capacitors

Any Mylar Capacitors may be supplied in ammo-style tape by special order – 1000 piece minimum

- High performance at low cost Non-inductive construction
- High stability with frequency over an extended operating life
- Capacitor dimensions and lead spacing may vary

Operating temperature range	-40°C to +85°C
Dissipation factor	≤.01 (at 1kHz)
Dielectric strength	150% of rated voltage for 5 sec.

MYLAR CAPACITOR CROSS REFERENCES:

Panasonic: ECQ-E Series; Sprague: DF/450P/451P/453P; Westlake: 160/168/185/167/184/186; Rubycon: MC/MN; Mepco: 713A1/719A1/C280; TRW: X601PE/X601CPE;

Packtron: MF/RB; Secor: MMKS/MMKR/MMDR; RIFA: PHE353/PHE354; Roederstein: MKT 1818/MKT 1822; WIMA: MKS; CSF Thompson: MD/MC; Siemens: B325X-XX; NIC: NEM/NRM; Nichicon: DDXM; Phillips: 712 A1 series

† Denotes 20% tolerance * Prepackaged: please order in increments of 10, 100 or 1000

Part	Product			CaseSize		Pri	cing	
Number	Number	Capacitance	Voltage	LxTxH (mm)	1	10	100	1000
26833	MY.001★	.001µ <i>f</i>	100V	7x3x7	*	\$.10	\$.06	\$.04
26868	MY.0022	.0022µ <i>f</i>	100V	6x3x10	*	.10	.06	.04
26876	MY.0047	.0047µ <i>f</i>	100V	6x3x9	*	.10	.06	.04
26884	MY.01★	.01µ <i>f</i>	100V	6x3x7	*	.10	.06	.04
26905	MY.022★	.022µ <i>f</i>	100V	6x3x10	*	.15	.10	.06
26921	MY.033	.033µ <i>f</i>	100V	8x4x11	*	.15	.10	.06
26930	MY.047★	.047µ <i>f</i>	100V	8x4x12	*	.15	.10	.06
135562	MY.1/50	.1µƒ†	50V	14x6x12	*	.12	.07	.03
26956	MY.1★	.1µ <i>f</i>	100V	12.5x5x9.5	*	.17	.12	.07
93921	MY.1/250*	.1µ <i>f</i>	250V	12.5x5.5x10	*	.19	.12	.07
26972	MY.22★	.22µ <i>f</i>	100V	12.5x5.5x10	*	.19	.12	.07
93964	MY.33/250	.33µ <i>f</i>	250V	18x7x12.5	.32	.25	.19	.15
26999	MY.47★	.47µ <i>f</i>	100V	18x6x11.5	.32	.25	.19	.15
27001	MY1★	1μ <i>f</i>	100V	18x7.5x14	.59	.49	.39	.25
93999	MY2.2/250*	2.2µ <i>f</i>	250V	26x9x16	.75	.65	.55	.45

Large Can Aluminum Electrolytic Snap Capacitors (±20%)

Snap-Ins!

NRLM Series

- D -

Low Voltage

50VDC Ceramic

- Designed as input filter for switched mode power supply standard 10mm (.400") snap-in spacing
- Operating temperature range: -40°C to +85°C max. leakage current: 0.02CV (uA) or 3mA whichever is smaller
 Can-Top safety vent

CROSS REFERENCES: Aero M: LP/LPR; Elna:LP3/LP4; Illinois Capacitor:LBA/LPR; Mallory:LDX; Marcon:CEAWF;

SN10000/50 10,000µf

Nichicon:LLK/LLQ; Panasonic:TS-UP/TS-U; Phillips (MEPCO):3487/3489; Rubycon:RSP; Spraque:80D/82D; United Chemicon:SMG(VN)/SMH(VN)

Part Product Size (mm) Pricing Capacitance Number Number Voltage DxL 100 115351 SN220/200 220µf 200V 30 x 31 \$1.75 \$1.49 \$1.25 1.95 115377 SN470/200 470µ*f* 200V 25 x 51 1.75 1.25 155889 SN560/200 560µf 200V 23 x 41 1.95 1.75 1.25 115422 SN4700/50 4,700µf 50V 30 x 51 1.95 1.75 1.25 115431 SN6800/50 6,800µf 50V 30 x 51 2.75 2.49 1.95

50V

35 x 40

3.95





15270

DC.1

157737

.13 .10

.08

2.95

3.49

Sound Devices - Buzzers, Sensors and Microphone Cartridges

1.5-28VDC Piezo Audio Signal Device JAMECO 6-9VDC 800Hz Mini-Buzzer JAMECO 40kHz Ultrasonic Sensors

- · Single tone
- Rated: 1.5-28VDC @ 20mA
- Sound pressure: 95dB @ 3500Hz
- Top mounting via mounting nut or base mounting via screw holes
- · 4.5" color coded connector wires
- · Two 0.6" screws with washers and nuts
- 1.35" mounting hole spacing
- Size: 1.0"H x 1.1"Dia.

Part No. Description 76021 Piezo audio signal......\$2.65 \$2.35

6-28VDC Audible Signal Devices

- · Single tone
- · Turns on and off with low power transistor, SCR or IC
- Rated: 6-28VDC @ 15mA
- Solid-state no moving parts
- · Panel mounts in 1.25" round hole · Black plastic case - includes
- mounting nut
- Sound pressure: 80dB @ 2900Hz
- Frequency: 2900Hz ±300
- Size: 1.4"H x 1.7"Dia. Color: black
- · P/N 32601 single tone constant audio output
- · P/N 123537 dual tone constant audio output pulsed audio output (terminal selected)

Part No.	Product No.	Output Tone	1	10	100
32601	S3240*	Single	\$4.25	\$3.75	\$2.95
123537	D3240	Dual	2.95	2.49	1.95

110VAC Piezo Audio Indicator

- Operating range: 60V 150V
- · Sound pressure level: 90dB
- · Current drain: 20mA
- · Output tone: pulse
- · 6" lead wires
- · Fits 1.125" diameter opening
- · Includes mounting nut

Part No.	Product No.	1	10	100
184743	FM-110A-903AL	\$3.95	\$3.49	\$2.95

- · Operates on 6-9VDC
- Output frequency: 800Hz
- Draws only 30mA @ 9VDC Voltage: (nominal) 9VDC @ 25mA; (range) 6-12VDC
- SPL: 75dB Sound: 80dB
- Frequency range: 400Hz ±15%
- Pin spacing: 27.9mm
- 1.1" mounting hole spacing Color: black
- Size: 1.3"L x 0.6"H Weight: 0.02 lbs.

		Description	1	10	100
24871	MB6★	Mini-buzzer.	\$1.49	\$1.25	\$.99

JAMECO 2-12VDC Mini Alarm Siren

- Rated: 2-12VDC @ 300mA
- Sound pressure: 108dB
- Output frequency: 3000Hz
- · Black ABS plastic housing 16" color coded connector
- wires, tinned Size: 2.8"Dia. x 2.5"L

Part No. Product No. Description 148152 YC-321-1 Alarm siren....\$7.95 \$6.95 \$6.25

9-15VDC 400Hz Mini-Buzzer

- · Operates on 9-15VDC
- · Output frequency: 400Hz
- Rated 12VDC @ 25mA
- Sound: 75dB
- · Wire leads: 4.5"L
- Size: 1.3"L x 0.7"W x 0.6"H
- 1.1" mounting hole spacing Color: black

Part No. Product No. Description **140695** MB7 Mini-buzzer...\$1.39 \$1.15 \$.85

9VDC Electromechanical Buzzer

- Ideal for use in alarms and timers
- Sound pressure: 80dB (CLB27)
- Sturdy metal case Weight: 0.2 lbs
- Rated: 9VDC @ 220mA

• FaSt-011	terminals • Size:	1.3 H X Z	.u Dia.		
Part No.	Description	1	10	100	1000
105822	9V buzzer	\$.99	\$.79	\$.59	\$.45

- · Case: aluminum flower
- Frequency: 40kHz ±1.0kHz

136653 Transmit/Receive

- Capacitance: 2000pf ±30%
- · Transmitter: 136653 bandwidth 4.0kHz/112dB, sound pressure level 119dB/40 ±1.0kHz (0dB+0.0002 µbar) / 10V SN/cm/min.
- Receiver: bandwidth 3.5kHz @ -71dB, min. sensitivity 65dB/40 \pm 1.0kHz (0dB vs 1V μ bar) R=3.9k Ω
- · Lead length/spacing: 0.39"
- Case size: 0.47"H x 0.62" Dia.

139491 Transmit/Receive

- Capacitance: 2000pf ±20%
- Transmitter: bandwidth 5.0kHz/100dB, sound pressure level 112dB/40 ±1.0kHz (0dB+0.0002 µbar) / 10V SN/30cm/min. • Receiver: bandwidth 5.0kHz @ -75dB, min. sensitivity 67dB/40 ±1.0kHz (0dB vs 1V μ bar) R=3.9k Ω · Lead length/spacing: 0.28"
- Case size: 0.30"H x 0.43" Dia

0030 3	120. 0.00 11	A O. IO DIG.			
Part No.	Product No.	Description	1	10	50
136653	40TR16F	Sensor set.	.\$5.95	\$5.35	\$4.49
139491	40TR12B	Sensor set.	5.95	5.35	4.49

Hands-Free Condenser Microphone

- · Cord length: 8'
- · 3.5mm male stereo plug
- Size: 1.9"L x 1.2"W x 0.3"H
- Wt: 0.1 lbs. One-year warranty



Desktop Microphone

- · Neck length: 17.5"
- · Cable length: 5.5'
- · Weight: 0.1 lbs.
- · One-year warranty

Single Tone Magnetic Transducers (External Drive Required)

0	Part No.	Description	1	10	2
5	129963	Desktop microphone	.\$4.95	\$4.49	\$3.9

5 and 12VDC Piezo Magnetic Buzzers

32601

These 2-pin devices have driver circuits so that they can easily be used by applying a DC voltage source. The clear and penetrating sound make these buzzers ideal for fire and burglar alarms, as well as smoke detectors. • Single tone

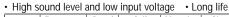






· Applied voltage: 1/2 duty, square wave

· Applications: counters, monitors, scanners, computers, peripheral equipment, fire and burglar alarms, and smoke detectors · Low power consumption







106500 138739

detector	o	.01.0			76	064		1387	12			Frequency	Rated	Coil	Mounting		Wt.			
	Operating	Frequency		Size	Wt.					l	Part No.	(Hz @ dB)	Voltage	Resistance	Method	(D" x H")	(lbs.)	1	10	100
Part No.	Voltage (DC)		Туре	(D" x H")	(lbs)	1	10	100	1000		138721	2048 @ 80	1.5	50Ω	2 PC pins	.46 x .32	.003	\$.75	\$.59	\$.45
76064*	5V @ 30mA	2.3 @ 85	Magnetic	.57 x 0.4	.004	\$1.89	\$1.65	\$1.39	\$.99		138739	2400 @ 85	5.0	47Ω	2 PC pins	.46 x .35	.003	.99	.79	.65
138712	12V @ 7mA	4.0 @ 80	Piezo	.54 x 0.3	.002	1.89	1.65	1.39	.99		106500	3200 @ 80	1.5	38Ω	2 PC pins	.48 x .40	.005	1.09	.89	.75

Omnidirectional Electret Condenser Microphone Cartridges

Applications:

• Telephone and answering devices • Built-in microphones for tape recorders • Intercoms

Microphone bushing for P/N 175185 (* 10 piece minimum)

- Omnidirectional Modems for computers
- Sonic controlled toys and sensors







.16"L x .20"





\$.12





 Compl 	eted micropho	ones for rec	ording, test	ing, and mo	onitoring	 Hearing aids 									
Part No.	Туре	Sensitivity	Impedance	Frequency (Hz)	Max. Op. Volt. (VDC)	Stand Op. Volt. (VDC)	Current (Max.)	Sensitivity Reduction	S/N Ratio	Terminals	Size (H x Dia.)	1	10	100	1000
116505	WM-54PC	-44 ±2dB	Low	20-16,000	10V	2.5V	0.6mA	-3dB @ 2V	>60dB	PC pin leads	.20" x .38"	\$.75	\$.59	\$.49	\$.39
136573	WM-60PC	-54 ±2dB	Low	20-12,000	1.5-12V	4.5V	0.5mA	-3dB @ 3V	>40dB	PC pin leads	.30" x .38"	.75	.59	.45	.39
137437	WM-62A	-45 ±4dB	Low	20-16,000	10V	2.0V	0.5mA	-3dB @ 1.5V	>58dB	Solder pad	.12" x .24"	1.09	.89	.69	.59
152709	WM-62L	-45 ±4dB	Low	20-16,000	10V	2.0V	0.5mA	-3dB @ 1.5V	>58dB	.5" wire leads	.12" x .24"	.75	.59	.45	.39
160979	WM-64PKT	-44 ±3dB	>2.2K	20-16,000	10V	2.0V	0.5mA	-3dB @ 1.5V	>58dB	PC pin leads	.10" x .24"	.29	.19	.15	.10
140986	CRM919	-64 ±3dB	1kΩ ±30%	20-10,000	1.5-12V	3.0V	0.8mA	-3dB @ 3V	>40dB	PC pin leads	.90" x .39"	.79	.65	.45	.39
175185	KUC7823	-51 ±2dB	22K	150-8,000	1.5-12V	4.5V	0.5mA	-2dB @ 4V	>40dB	Solder term	.19" x .24"	.29	.22	.17	.12
	Microphone Bushing														



175193 KCU2054

\$.09

JAMECO Round Ferrite Type Speakers

Designed for a wide range of audio electronics. For speaker wire, see page 68.

- · Pretinned speaker lugs · Large magnet
- · Anodized metal surfaces
- · Braided copper voice coil leads





 Paper 	diaphra	ıgm				135589 fr	135589 back						
Part	Product		ensions Heiaht				Output SPL	Freq. Range	Magnet Size (Dia.xTxH)	Net Wt.		Price	
Number	Number	(mm) (inch)	(mm) (inch)	(W)	(W)	(Ω)	(dB)	(Hz)	(mm/inch)	(lbs.)	1	10	100
135589	FE200	50	17.8	.2	.4	8	83	420 to	32x18x6	.08	\$1.35	\$1.15	\$.79
		2.0	0.7					5000	1.3x0.7x0.2				
10840	FE201	57	17.8	.2	.4	8	88	400 to	32x18x6	.11	1.35	1.15	.89
		2.2	0.7					4500	1.3x0.7x0.2				
177130	57RF07	57	20.2	.5	.9	45	88	500 to	40x7.6x12.7	.2	1.15	.89	.69
		2.2	0.8					8000	1.6x0.3x0.5				
135714	FE202	66	19.5	.3	.5	8	88	340 to	32x18x6	.13	1.35	1.15	.89
		2.6	0.8					4000	1.3x0.7x0.2				

JAMECO Round Alnico Type Speakers

- For computer case use Paper diaphragm
- Wide frequency response Large magnet
- P/N 147475: 6" lead wire





135773 front 135773 back

			ensions					Freq.	Magnet Size			Dulas	
Part Number	Product Number	Dia. (mm) (inch)	Height (mm) (inch)	Nom (W)				Range (Hz)	(Dia.xH) (mm/inch)	Wt. (Ibs.)	1	Price 10	100
88410	A0200	50 2.0	19.0 0.8	.2	.4	8	87	430 to 4500	13x10 0.5x0.4	.09	\$1.75	\$1.49	\$1.25
135765	A0201C	57 2.2	19.5 0.8	.3	.5	8	87	400 to 4000	13x10 0.5x0.4	.07	1.35	1.09	.79
135773	A0202C	66 2.6	21.5 0.9	.5	1.0	8	88	320 to 5000	13x10 0.5x0.4	.10	1.35	1.09	.89

JAMECO Flat Magnet Square 8Ω Piezo Speakers

- · Excellent for alarms or other voice uses
- · Square frame
- · Stainless steel diaphragm



			nsions		out		Output	Frequency	Net		Price	
Part	Product	Dia.	Height (mm)					Range	Wt.			100
Number	Number	(inch)	(inch)	(W)	(W)	(Ω)	(dB)	(Hz)	(lbs)	1	10	100
34024	AZ30S	30 1.2	5 0.2	.4	.8	8	70	1300-8000	.01	\$1.49	\$1.25	\$.99
76030	AZ40S	40 1.6	5 0.2	.4	.8	8	70	600-6000	.02	1.75	1.49	1.25

76030

front & back

JAMECO Communications Speaker w/ Magnetic Mount

- Maximum input: 8 watts Frequency range: 200 18,000Hz
- Impedance: 8Ω Includes 3' cord with 3.5mm male plug
- Black ABS case
 Size: 3.0"W x 2.0"D x 2.8"H
 Wt.: 0.5 lbs.

Part No. Product No. Description 102031 CS3



/ IIII Multimedia Speakers (Pair)

Multimedia speaker systems for computers.

- 14.5W (RMS) self amplified per set (2)
- Headset jack Size: 2.9"W x 4.7"D x 7.2"H
- Complete specs on page 160

Part No. Description 2.7.....**\$12.95 \$11.49 \$9.95** 140020 14.5W stereo amplified speakers



SOUND MINDS 4 Watt Amplified Stereo Speakers Fits 5.25" Bay

• 8Ω speakers with frequency response of 250Hz to 20kHz @ 83dB

- · Compatible with all sound boards, CD-ROMs, CD digital audio players and MPC systems
- Size: 5.8"W x 7.5"D x 1.7"H

Wt. (lbs.) Part No. Description 153541 4 watt self amplified speakers 1.4.....\$69.95 \$59.95

JAMECO Square Ferrite Type Speakers

Designed for a wide range of audio electronics. For speaker wire, see pg 68.

- · Pretinned speaker lugs · Large magnet
- Anodized metal surfaces
- · Braided copper voice coil leads
- Paper diaphragm
- · Wide frequency response





99995 front

Part	Product	Dime Dia.	ensions Height				Output SPL	Freq. Range	Magnet Size (Dia.xTxH)	Net Wt.		Price	
Number	Number	(mm) (inch)	(mm) (inch)	(W)				(Hz)	(mm/inch)	(lbs)	1	10	100
135693	FEB200	50	17	0.2	.3	8	82	500 to	32x18x6	.12	\$1.25	\$.99	\$.69
		2.0	0.7					6000	1.3x0.7x0.2				
31958	FEB216	66	20	0.2	.4	16	85	330 to	32x18x6	.14	1.75	1.49	1.25
		2.6	0.8					8000	1.3x0.7x0.2				
99995	FFB204	66	23	3.0	4	4	95	300 to	45x22x8	.29	1.95	1.75	1.49
	. LDLU .	2.6	0.9	0.0	ļ .		, ,	14000	1.8x0.9x0.3		,0		,
171168	FEB450SP	107	38	1.0	2	8	90	300 to	45x25x8	.37	1.75	1.49	1.25
	1 20 10001	4.2	1.5	1.0	_		/0	14000	1.8x1.0x0.3	.0,	1.70	1.17	1.20

JAMECO Square Alnico Type Speakers

- · For computer case use
- · Pretined solder lugs
- · Anodized · Paper diaphragm





135781 front

Part	Product		nsions Height		out Max			Freq. Range	Magnet Size (Dia.xH)	Net Wt.		Price	
Number	Number	(mm) (inch)	(mm) (inch)		(W)			(Hz)	(mm/inch)	(lbs)	1	10	100
111587	B0102	42	16	.1	.3	8	83	500 to	13x10	.05	\$1.75	\$1.49	\$1.25
		1.7	0.6					5500	0.5x0.4				
135781	B0200	50	19	.2	.4	8	80	430 to	13x10	.09	1.75	1.49	1.09
		2.0	0.8					4000	0.5x0.4				

JAMECO 8Ω Oval Alnico Type Speaker

For computer case use

• Paper diaphragm • Impedance: 8Ω

· For rectangular openings





Dimensions Input Output Freg Magnet Size Net

Number Number (mm) (min) (min) (ml) (dB) (Hz) (mm/inch) (lbs) 1 1 10 100 135811 A1527C02 41x72 30 2 5 82 450 to 13x12 1.6x2.8 1.2 2 5 82 2000 0.5x0.5 .13 \$2.95 \$2.49 \$2.25	Part	Product	Dia.	Height		Max	SPL	Range	(Dia.xH)	Wt.		Price	
135811 A152/C02	Number	Number		(mm) (inch)	(W)	(W)	(dB)	(Hz)	(mm/inch)	(lbs)	1	10	100
1.6x2.8 1.2 2 3 02 20000 0.5x0.5 1.3 32.73 32.47 32.23	125011	A1527002	41x72	30	2	5	02	450 to	13x12	12	\$2.05	\$2.40	¢2 25
	133011	M1327002	1.6x2.8	1.2		5	02	20000	0.5x0.5	.13	φ2.7J	⊅ 2.47	\$2.25

JAMECO Samarium Cobalt **Metal Frame Low Profile Speaker**

- Round frame
- Anodized
- Ultra thin

· Paper diaphragm

· Solder tabs

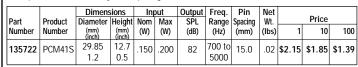




Output Freq. Magnet Size Net Dimensions Input Dia. Height Nom Max Imp (mm) (mm) (mm) (W) (W) (Ω) Price Part Product Number Number (dB) (Hz) (mm/inch) (lbs) 10 100 50 8.5 550 to 12.5x1.5 135626 MSC299 .3 .5 8 \$2.49 \$2.25 0.5x0.6

J<u>AMECO</u> 8Ω 1.2" (30mm) P.C. Mountable Speaker

- Round frame design Ideal for PC board mounting
- Impedance: 8Ω Mylar diaphragm Solder leads









1/4 Watt Carbon Film Resistors (±5%)

160 Standard Resistor Values Chart

Part No. Ohms	Part No.	Ohms	Part No.	Ohms	Part No.	Ohms	Part No.	Ohms	Part No.	Ohms	Part No.	Ohms	Part No.	Ohms	Part No.	Ohms	Part No.	Ohms
† 2.2	29882	10 ▲●	31106	47 ▲●	30470	220 ▲X	29663	1.0K ▲X	31026	4.7K ▲×	30453	22K ▲●	29997	100K ▲X	31202	470K ▲●	†	2.2M
† 2.4																		
† 2.7	†	12	†	56	30605	270 ▲●	29735	1.2K ●	31270	5.6K ▲●	†	27K	†	120K	†	560K	†	2.7M
† 3.0																		
† 3.3																		
† 3.6																		
† 3.9																		
† 4.3	† 4.3 † 20 † 91 † 430 30277 2.0K ▲● † 9.1K † 43K † 200K † 910K † 4.7M																	
† 4.7																		
† 5.1	†	24	t	110	†	510	†	2.4K	†	11K	†	51K	†	240K	†	1.1M	t	5.6M
† 5.6																		
† 6.2	†	30	†	130	†	620	†	3.0K	†	13K	†	62K	†	300K	†	1.3M	†	6.8M
† 6.8																		
† 7.5	†	36	†	160	†	750	Ť	3.6K	†	16K	†	75K	†	360K	†	1.6M	†	8.2M
† 8.2	†	39	t	180	†	820	Ť	3.9K	†	18K	†	82K	†	390K	†	1.8M	†	9.1M
† 9.1	†	43	†	200	†	910	t	4.3K	†	20K ●	†	91K	†	430K	†	2.0M	29938	10M ▲●
	K=1000 ohms M=1.000.000 ohms – For (♠), (♠), (★) information, see symbol column in 1/4 walt Resistor Assortments below.																	

Any value with part number is a stock item. † Any standard resistor value above (without part number) may be special ordered – 1,000 pc. minimum – \$10.95/K (bulk)



1/4 Watt Carbon Film Resistors (±5%) Bulk

To order: Just use 5-digit p	art number adja	icent to ohms ii	n above chart					
\$.99/bag 100 piece bags	Pr	icing (sold in	100-piece baç	js)				
Part No./Ohms	1	10	50	100				
(see chart above)	\$.99/bag	\$.79/bag	\$.69/bag	\$.59/bag				
1/4 West Combon Film Deci								

Resist	or Color Code
	1st #
	— 2nd #
	# of zeros
-	Tolerance
Į.	

 All values shown in ohms (Ω) Values may not be combined. for quantity price breaks Sold in minimum increments of 100 each

.,000 poi		o . i c (Duilly	
1st & 2nd Band	31	d Band	4th Band
0 - Black	Black	1	Gold -
1 - Brown	Brown	10	±5%
2 - Red	Red	100	
3 - Orange	Orange	1,000	
4 - Yellow	Yellow	10,000	Silver -
5 - Green 6 - Blue	Green	100,000	±10%
7 - Violet	Blue	1,000,000	
8 - Gray	Silver	0.01	No Band -
9 - White	Gold	0.1	±20%

			1/4 Watt Carbon Film Resistor (±5%) Assortments			
Part No.	Product No.	Symbol	Description	1	10	25
10719	ASST8★	N/A	5 each 70 values (every other value from R10 ohm-R5.6 Meg) 1/4 watt carbon film (350 pcs.)	\$8.95	\$7.95	\$6.49
103165	ASST30★	● / X	10 each (24 (●) values) 50 each (6 (X) values) 1/4 watt carbon film resistors (540 pcs.)	12.95	11.49	9.95
10663	ASST27	A	100 each (27 (▲) values) 1/4 watt carbon film resistors (2,700 pcs.)	19.95	17.95	15.95
10655	ASST161	N/A	100 each 161 values (resistor values chart above) 1/4 watt carbon film resistors (16,100 pcs.)	109.95	99.95	89.95
81832	CAB14R	N/A	1/4 watt resistor component cabinet kit – 30 values (540 pcs.) see page 22	27.95	24.95	22.49

1/8 & 1/2 Watt Carbon Film Resistors (±5%)

	1/8 & 1/2 Watt Resistor Assortments Value Chart (Ohms)										
	150 √ X										
47 √ X	220 √#	390 ×	1.0K √ #	2.2K √ X	4.7K √ #	6.8K X	22K √ X	47K √ ×	1.0M √ X		
100 ✓#	270 √ X	470 ✓ X	1.5K ✓ ×	2.7K √ X	5.1K ✓ ×	10K √ #	27K X	100K √ #	10M √ X		

(✓), (✗), (#) symbols indicate Resistor values included in Assortments below.

1/8 Watt Carbon Film Resistor (±5%) Assortments

Any standard resistor value (above) may be special ordered -1,000 pc. minimum - \$12.95/K (bulk) - call for larger quantity pricing.

Part No.	Product No.	Description	1	10
108302	ASST1830	10 each (24 (x) values) 50 each (6 (#) values) 1/8 watt		
		carbon film resistors (540 pcs.) (see chart above)	\$12.95	\$11.49
108290	ASST1827	100 each (27 (✓) values – see chart above)		
		1/8 watt carbon film resistors (2,700 pcs.)	27.95	24.95
108329	CAB182R	1/8 watt resistor component cabinet kit – 30 values		
		(540 pcs.) see page 22	27.95	24.95

1/2 Watt Carbon Film Resistor (±5%) Assortments

Any standard resistor value (above) may be special ordered -1,000 pc. minimum - \$15.95/K (bulk) - call for larger quantity pricing.

Part No.	Product No.	Description	1	10
107836	ASST1270★	5 each 70 values (every other value from R10 ohm-R5.6M)		
		(see chart – top of page) 1/2 watt carbon film (350 pcs.)	\$10.95	\$9.95
107852	ASST1230★	10 each (24 (x) values) 50 each (6 (#) values) 1/2 watt		
		carbon film resistors (540 pcs.) (see chart above)	14.95	13.49
107844	ASST1227	100 each (27 (/) values – see chart above)		
		1/2 watt carbon film resistors (2,700 pcs.)	29.95	26.95
107879	CAB12R	1/2 watt resistor component cabinet kit – 30 values		
		(540 pcs.) see page 22	29.95	26.95

Resistor Networks (±2%)

Single-In-Line "SIP" Resistor Networks 8, 10-Pin Bussed (25mW/Resistor) ±2%

Features (8BRN/10BRN):

· Rated power per resistor Bussed/Common at 70°C: 125mW/ resistor

 Operating temp. range: -55°C to +125°C Resistance temperature coefficient:

200 ppm/°C Max. working voltage: 100V or rated power x

resistance, whichever is smaller

Insulation resistance: 10.000MΩ min. at 100

· Solderability: per MIL-R-83401 • 8-pin package (7 resistors) = 8BRN

10-pin package (9 resistors) = 10BRN

Low profile 5mm (.200" body height)

· Low profile is compatible w/ DIPs

· Cermet thick film construction

* 10 piece minimum

		2. ±1	0.1 1.2 max.	Dime	nsions:	mm
		LA COMPANY	Service Lab	Part No.	Pins	Ohms
	Ī		TITI	97826	8	10K
V	100	75.5	~~~	97851	10	330
		1111		97869	10	470
		-		97877	10	1.0K
				97893	10	2.2K
		11111	1111	24660	10	4.7K
	Pric			24643	10	10K
	10	100	1000	98087	10	47K
ķ	\$.19	\$.15	\$.12	98095	10	100K

MAX

SIP and DIP Resistor Network Cross Reference Chart

Jameco	CTS	A – B	Bourns	Dale	Beckman	Sprague	MEPCO
8BRN	770-81-R	708A	4608X-101	CSC08A01	L08-1-R	356CF X2PD	9S08 GL002
10BRN	770-101-R	710A	4610X-101	CSC10A01	L10-1-R	256CX X2PD	9S10 GL002
16IRN	761-3-R	316B	4116R-001	MDP16-03	898-3-R	916C X5SR	D16H 12-J

Dual-In-Line "DIP" Resistor Networks 16-Pin Isolated (140mW) ±2% Features (16IRN):

• Maximum operating voltage: 100V • Tolerance: ±2%

• Temperature coefficient: ±100ppm/°C

· Operating temperature: -55°C to +125°

• Insulation resistance: $10,000M\Omega$ min. · Lead solderability / Solvent resistance:

meets requirements of MIL-R-83401 · Power rating at 70°C: 2.25 watts

· Compatible with automatic insertion equipment

Copper leads for excellent heat dissipation

nei	an	ce:	±Ζ	%					
С	16	pir	ıs						3
	Į	Ş	Ş	Ş	Ş	Ş	Ş	Ş	<
	{	{	{	{	{	{	{	{	.0
	1	•	•	•	_	•	•	•	(.6
					Pri	cin	g		

10 100 1000

\$.59 \$.49 \$.39 \$.29

₩.	1 All	"
K	Part No.	Ohn
.K	164005	3
4	108556	10
Pin #1	108564	22
5) ref.	108572	33
,,	108581	47
7	108599	1.0
-	108610	4.7
1	100/00	10



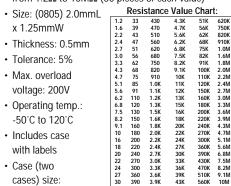
108644 100K

SMD Resistor Assortment (±5%)

144 Values (50 pcs. each) 7,200 Pieces

· Surface mount 0805 resistors, 144 values ranging





cases)	Size:	30	390	3.9K	43K	560K	10
10.5"L	x 6.7"W x 1.7"Th	ick	•	• Wei	ght: 1	.9 lbs	
Part No.	Product No.			1	1	0	

SMD Resistor Assortment (±1%)

16-500**\$69.95 \$62.95 \$56.95**

56 Values (200 pcs. each) 11,200 pieces 1206 Chip Resistors Packaged in strips of 200 pieces each



Surface mount 1206 resistors, 56 values ranging from 10Ω to $1M\Omega$ – see chart (below).

· Thick film 1206 size chip

•	To	lerance:	1%

172806

· Max. working voltage: 200V

· Max. overload voltage: 400V

Power @ 70°C: 1/8W

· Operating temp.: -55°C to +125°C

10 1123 0	10	730	7.510	7310	750			
Resistor dimensions	90.9	909	9.09K	90.9K	909			
(mm): 3.10±0.10 (L) x 1.5	5±0.	.10 (۱	W) x					
0.55±0.10-0.05 (H) top to	ermin	ator:	0.45	±0.20 ((W)			
bottom terminator: 0.35±0	0.15	(W)						

- Temp. coefficient: ±100 ppm/°C Weight: 0.3 lbs.
- · 4 digit indication: 1st 3 significant, 4th multiplier

Part No.	Product No.	1 10
156881	SMR1206SB \$99.9 5	\$89.95

Potentiometers (±10%)

183628

183601/183599/183581

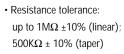
183530

183556

· Industrial version

Series 53C1:

- · Material: Plastic conductive
- · Dielectric strength: 1000VAC for 60 seconds @ ATM pressure



· Power rating: 2W continuous

· Working voltage: 500VDC across terminals

Series 73JA:

- · Material: metal shaft/bushing
- · Dielectric strength: 1000VAC for 60 seconds @ ATM
- · Wirewound: 10-turn

· Working voltage: 500V max.

• Resistance tolerance: ±5% • Pwr. rating: 2W @ 70°C

Part No.	Product No.	Ohms	1	10	50
183628	53C1-5K	5K	\$12.79	\$11.49	\$10.49
183601	73JA-1K	1K	13.79	12.49	11.49
183599	73JA-5K	5K	13.79	12.49	11.49
183581	73JA-10K	10K	13.79	12.49	11.49

POURNS Potentiometers (±10%)

- · Resistance tolerance: ±10%
- · Insulation resistance: (500VDC) $1,000M\Omega$ min.

Series 3540: • 10-turn; wirewound

- · Absolute minimum resistance: 1Ω or 0.1% max.
- · Load life: 1,000 hours, 2W

Series 3299: • 25-turn; cermet type

· Absolute minimum resistance: 2Ω or 1% max.

· Load life: 200 cycles

Part No.	Product No.	Ohms	1	10	50
183513	3540S-1-102	1K	\$13.49	\$11.95	\$10.95
183530	3540S-1-202	2K	13.49	11.95	10.95
183548	3540S-1-502	5K	13.49	11.95	10.95
183521	3540S-1-103	10K	13.49	11.95	10.95
183556	3299W-102	1K	2.95	2.75	2.49
183564	3299W-103	10K	2.95	2.75	2.49
183572	3299W-104	100K	2.95	2.75	2.49

11885

JAMECO Aluminum Enclosures

Ideal boxes for those projects that get left lying around! Put them in an economical aluminum enclosure. The enclosure come in two pieces which slide together.

Value Chart (Ohms)

10K

12.1K

15K

24.3K 243K

30.1K 301K

39.2K 392K

49.9K

75K

100K

121K

150K

200K

499K

619K

10 100 1K

20 200 2K

30.1 301 3.01K

49.9 499 4.99K

15

39.2

12.1 | 121 | 1.21K

150 1.5K

243 2.43K

392 3.92K

750 7 5K

61.9 619 6.19K 61.9K

See page 111 for a larger selection of economical enclosures

ioi youi	prototyping n	ecus:					
Part No.	Product No.	Size (L x W x D)	Weight (lbs.)	1	10	50	100
11869	B2300	4.0" x 2.0" x 2.8"	0.2	.\$3.95	\$3.49	\$2.95	\$2.49
11885	B2320	5.0" x 4.0" x 3.0"	0.4	5.95	4.95	4.49	3.95
11893	B2335	7.0" x 6.2" x 4.6"	0.8	7.95	6.95	6.25	5.59

The Products You Need... The Service You Deserve!™

www.jameco.com

JAMECO 0.2 Watt Linear Taper Potentiometer (±20%)

With 10 Detents

· Number of detents: 10 Shaft diameter: 0.235"

· Shaft length: 0.605"

• Insulation resistance: 100M Ω @ 500VDC

Thread size: M7 x .75mm

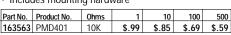
· Mounting hole: 0.026" · Solder eyelet diameter: 0.123

· Max. panel thickness: 0.15"

· Max. operating voltage: 150VAC

Rotational life: 15,000 cycles

· Includes mounting hardware



- · 2 watts @ 70°C ambient
- · Conductive plastic element
- Military No.: RV4N-AYSD
- Taper: linear
- Non-commercial
- Tolerance: ±10%
- Temperature range: -55°C to +120°C
- Shaft diameter: 0.25"
- Shaft length: 0.875" (7/8")
- · Slotted shaft end
- · Mounting hole: 0.375"
- Max. panel thickness: 0.25"
- Solder eyelet dia.: 0.0625"
- Bushing length: 0.35"
- · Non-rotational key · Includes mounting hardware
- · Weight: .08 lbs.
- See knobs page 49

Part No.	Product No.	Ohms	1	10	50	100
183610	53C3-500	500	\$6.95	\$5.95	\$4.95	\$4.49
13936	CMU1021★	1K	6.95	5.95	4.95	4.49
13995	CMU5021★	5K	6.95	5.95	4.95	4.49
13952	CMU1031★	10K	6.95	5.95	4.95	4.49
54869	CMU2531	25K	6.95	5.95	4.95	4.49
95417	CMU5031	50K	6.95	5.95	4.95	4.49
13979	CMU1041★	100K	6.95	5.95	4.95	4.49

OHMITE Resistors & Plate Choke

183724: 5Ω power resistor; 5W

183716: 50Ω power resistor; 50W

183708: 44µH RF plate choke 7-35MHz 183724/183716

Part No.	Product No.	1	10	50
183724	95J5R0	\$2.39	\$2.15	\$1.89
183716	L50J50R	6.39	5.75	5.25
183708	Z14	6.95	6.25	5.59

OHMITE 25 Watt Rheostat

& Accessories

183695: $1K\Omega$ wirewound rheostat; 25W







95417

.250 Dia. [6.35mm]

3/8 - 32 NEF-2A [9.52mm]

-Mounting Surface

173708

dial (.38" dia. shaft) 183679: 1/4" shaft finger grip knob; 1.5" Diameter

Part No.	Product No.	1	10	50
183695	RHS1K0	\$22.95	\$20.49	\$18.49
183687	5000	1.75	1.49	1.25
183679	5150	7.95	7.25	6.49



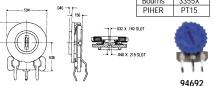


CTS 1/4 Watt 15mm Miniature **Linear Potentiometers (±20%)** X201 (19/32") Vertical Mount

- · Voltage rating: 350 VDC
- pricing Reliable CTS composition resistance element
- 1/4 watt @ 40°C • Power rating: below $5k\Omega$ 5kΩ & above - 1/4 watt @ 55°C

· Angle of rotation total rotation: 260° ±5°

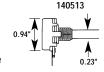




						-	
	Part No.	Product No.	Ohms	1	10	100	500
	161859	X201R150	150	\$.43	\$.29	\$.15	\$.09
1	94684	X201R500	500	.33	.27	.15	.065
	94692	X201R1K	1K	.45	.35	.29	.25
	35502	X201R252B	2.5K	.45	.35	.29	.25
	94705	X201R5K	5K	.45	.35	.29	.25
ı	94713	X201R10K	10K	.45	.35	.25	.19
	172136	X201R25K	25K	.33	.27	.15	.065
	94721	X201R50K	50K	.33	.27	.15	.065
ı	94730	X201R100K	100K	.45	.35	.29	.25

JAMECO 5 Watt Linear Taper Wire **Wound Potentiometers (±20%)**

- · 5 watt @ 70°C ambient
- Temperature range: -10°C to 70°C
- · Shaft diameter: 0.23" (6mm)
- · Shaft length: 0.67", except P/N 140521 (0.25")
- · Mounting hole: 0.32"
- · Max. panel thickness: 0.1"
- · Solder eyelet diameter: 0.055" x 0.13"
- · Non-rotational key
- · Includes mounting hardware



Cross Reference Chart

Equivalent to:

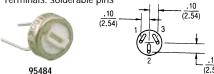
Beckman

Part No.	Product No.	Ohms	1	10	50	100
140513	PW5B100	100	\$2.95	\$2.49	\$1.95	\$1.75
140521	PW5B500	500	2.95	2.49	1.95	1.75

1/2 Watt 1/4" Round Single-Turn Cermet Potentiometers (±10%)

- 1/2 watt linear taper @ 85°C
- · Sealed to withstand wave soldering and immersion cl
- Ex _ [
- T
- T

9	Dourns	33275
cleaning process	Mepcopal	8050
Extended temperature range:	MEC	471
' '	Murata	3321P
55°C to +150°C • TO-5 grid	Spectrol	62-3
op adjustment	VRN	171
' '	Weston	567
erminals: solderable pins		40
.10	-	(2.54)
(2.54)		(2.54)

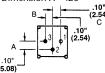


	95484					(2.34)	
Part No.	Product No.	Ohms	1	10	100	500	
95441	3329P1K	1K	\$.99	\$.79	\$.55	\$.45	
95450	3329P5K	5K	.99	.79	.55	.45	
96719	3329P10K	10K	.99	.79	.55	.45	
95484	3329P100K	100K	.99	.79	.55	.45	

We carry major manufacturers - call for large OEM pricing.

1/2 Watt 3/8" Square Single-Turn **Cermet Potentiometers (±10%)**

- 1/2 watt linear taper @ 70°C
- ▶PC pins: .100" grid (2.54mm)
- TO-5 grid Top adjusting
- Sealed to guard against contaminants
- Temp. range:-55°C to +125°C t Dimension A = .20"





Cross Reference Chart

Equivalent to:

3006P

8034

2101P

961-20

43P

Beckman

Mepcopal

Bourns

Murata

Spectrol

Cross Reference Chart

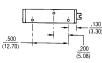
Equivalent to:

(5.08)					- 1	
Part No.	Product No.	Ohms	1	10	100	500
43123	63P500★	500	\$.79	\$.65	\$.55	\$.45
42964	63P1K★	1K	.79	.65	.55	.45
43043	63P2K	2K	.79	.65	.55	.45
43078	63P5K★	5K	.79	.65	.55	.45
43001	63P10K★	10K	.79	.65	.55	.45
43051	63P20K★	20K	.79	.65	.55	.45
43107	63P50K★	50K	.79	.65	.55	.45
43027	63P100K★	100K	.79	.65	.55	.45
43060	63P300K †	300K	.65	.49	.25	.15
63212	63P500K	500K	.79	.65	.55	.45
42981	63P1MEG★	1M	.79	.65	.55	.45

3/4 Watt 3/4" Rectangular 15-Turn **Cermet Potentiometers (±10%)**

105216 63P2MEG † 2M .65 .49 .25 .15

- 3/4 watt linear taper @ 70°C
- PC pins: .100" grid (2.54mm)
- · Side adjusting
- · Sealed to guard against contaminants
- Temp. range: -55°C to +125°C





Part No.	Product No.	Ohms	1	10	100	500
41937	43P500★	500	\$1.15	\$.95	\$.75	\$.59
41785	43P1K★	1K	1.15	.95	.75	.59
41865	43P2K	2K	1.15	.95	.75	.59
41890	43P5K★	5K	1.15	.95	.75	.59
41822	43P10K★	10K	1.15	.95	.75	.59
41873	43P20K★	20K	1.15	.95	.75	.59
41911	43P50K★	50K	1.15	.95	.75	.59
41849	43P100K★	100K	1.15	.95	.75	.59
63001	43P200K	200K	1.15	.95	.75	.59
41953	43P500K★	500K	1.15	.95	.75	.59
41806	43P1MEG★	1M	1.15	.95	.75	.59

Look for our cleaner more user friendly look



Limited Quantitites Available Items marked in blue

New Products Introduced in Our Catalog Items marked in red

	Part	Product
	Number	Number
t	163635	Number DC2405F11
	174861	DCR2405F12
	174879	DCR2405F52

JAMECO 1/2 Watt Linear Taper Potentiometers (±10%)

29081

.45 **29**0 11.43mm

- · 1/2 watt @ 70°C ambient
- Temperature range: -55°C to +125°C
- Non-rotational key
- Non-slotted shaft end
- Mounting hole: 0.3125"
- Shaft diameter: 0.25'
- Shaft length: 0.5625"
- · Max. panel thickness: 0.1875"
- · Solder eyelet diameter: 0.0625'
- Includes mounting hardware

 Weig 	ht: .03 lbs.				6.35	mm
Part No.	Product No.	Ohms	1	10	100	500
29049	P1K★	1K	\$.99	\$.79	\$.65	\$.55
29196	P5K★	5K	.99	.79	.65	.55
29081	P10K★	10K	.99	.79	.65	.55
29102	P100K★	100K	.99	.79	.65	.55
29065	P1MEG★	1M	.99	.79	.65	.55

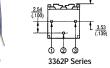
JAMECO 2 Watt Linear Taper Potentiometers (±20%)

- · 2 watt @ 70°C ambient
- Temp. range: -10°C to +70°C
- · Shaft diameter: 0.25'
- · Shaft length: 0.825'
- · Mounting hole: 0.375'
- Max. panel thickness: 0.15"
- Solder eyelet diameter: 0.07
- · Non-rotational key · Base length: 0.25"
- · Includes mounting hardware
- · Weight: .03 lbs. See knobs – pg 49

5				1 3		
Part No.	Product No.	Ohms	1	10	100	500
123959	PT1K	1K	\$2.95	\$2.49	\$2.25	\$1.75
123967	PT5K	5K	2.95	2.49	2.25	1.75

BOURNS 1/2 Watt Trimming Potentiometers (±10%)







3362W Series

123959

- Resistance tolerance: ±10% Absolute min. resistance:
- 1% or 2Ω max.
- Contact resistance variation: 1% or 1Ω max.
- Insulation resistance: 500VDC; 1,000M Ω min
- · Rotational life: 200 cycles
- · Terminals: solderable pins
- · Wiper positioning: 50% nominal

1/4" Top Adjustment

3362P Series Adjustment angle: 240° nominal

Part No.	Product No.	Ohms	1	10	100	500
182799	3362P1-500	50	\$.79	\$.65	\$.55	\$.45
182801	3362P1-200	200	.79	.65	.55	.45
182810	3362P1-501	500	.79	.65	.55	.45
182828	3362P1-502	5K	.79	.65	.55	.45
182836	3362P1-103	10K	.79	.65	.55	.45
182844	3362P1-204	200K	.79	.65	.55	.45
182852	3362P1-105	1M	.79	.65	.55	.45

1/4" Side Adjustment

3362W Series Single turn

Judge turn										
Part No.	Product No.	Ohms	1	10	100	500				
182861	3362W1-500	50	\$.79	\$.65	\$.55	\$.45				
182879	3362W1-201	200	.79	.65	.55	.45				
182887	3362W1-501	500	.79	.65	.55	.45				
182895	3362W1-102	1K	.79	.65	.55	.45				

Senix Distance Sensor Modules

Sends out a sound wave 20 times per second and calculates the distance based on the time from send to receive back. The distance is represented by an output voltage



from 0 to 10VDC (P/N 134105) or RS232 signal (P/N 151482).

- Sensing range: 4" to 60" · Sensor diameter: 1.8"
- Requires 15 to 24VDC @ 40mA (not included), recommend P/N 114825 (pg 90)
- Board size: 2.8"L x 1.8"W x 0.9"H
- · One-year warranty

134105: Output voltage: 0-10VDC • Weight: 0.2 lbs.

- Each 1VDC increment = 5.6" (e.g.: 1VDC output = 9.6")
- 151482: RS232 output Weight: 1.0 lb.

· Includes disk and computer cable

Part No.	Description 1	10
134105	Sensor – voltage output\$159.95	\$143.95
151482	Sensor – voltage output\$159.95 Sensor – RS232 output179.95	161.95

JAMECO 24VDC **Liquid Level Sensors**

Fill and Empty Type

176241: Control Box

- Input voltage: 24VDC @ 10A
- Output voltage: 24VDC @ 10A
- Size: 2.1"L x 2.1"W x 1.6"H

· Weight: 0.2 lbs. 176250 (Fill) / 176268 (Empty)

- · Maximum contact rating: 10W
- Maximum switching voltage: 100VDC
- · Max. switching current: 0.5A
- · Minimum breakdown voltage: 220VDC



- Maximum contact resistance: $100m\Omega$
- Size: 2.6"L Weight: 0.1 lbs.

Part No.	Description	1	10	25
176241	Control box\$14.9	95	\$13.49	\$11.95
176250	Sensor fill type9.9	95	8.95	7.95
176268	Sensor empty type9.9	95	8.95	7.95

Find What You Need Now!

www.jameco.com

Infrared Remote Control Receiver Modules

- · Used in TVs, VCRs, audio equip, car stereos and home computers
- · Single unit module which incorporates a PIN diode and a receiving preamplifier IC
- 940nm wavelength
- · 5VDC @ 2mA except





176541





176241

176250

139889 165008

P/N 165008 (3.5VDC @ 2.5mA) • Excellent mechanical strength and electrical stability • Weight: 0.1 lbs. 176541: • 4.7-5.3VDC input • Size: 0.6"L x 0.6"W x 0.5"H

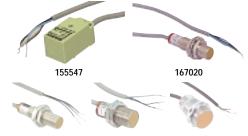
Part No.	Description	1	10	100	1000
131908	38.0kHz infrared remote receiver, side view	\$2.95	\$2.49	\$1.75	\$1.25
176541	56.8kHz infrared remote receiver, side view	2.95	2.49	2.25	1.95
139889	37.9kHz infrared remote receiver, top view	2.95	2.49	1.95	1.49
165008	40.0kHz infrared remote receiver, top view	2.95	2.75	2.49	2.25



12VDC Inductive Proximity Switch Sensors

Cylindrical and Square Styles

- · Operating voltage range: 10VDC-30VDC
- · Nominal operating voltage: 12VDC
- · Current consumption: 10mA max.
- Switching frequency: 1.0kHz (P/N 155580); 1.5kHz (P/Ns 155547/155563/155571/167020)
- · Sensing target: inductive type magnetic metal
- Sensing distance: ±10% (tin)
- · Short circuit protected · LED indicator
- Fast response 6' long cable Pre-tinned pigtail



155563	(2mm

155571 (5mm)

155580 (10mm)

l	Part	Product	Output	Effec. Dist.	Stand. Target	Size	Mounting	Pricing		
l	Number	Number	Circuit	(Iron)	(Iron) (mm)	(L" x W" x H")	Hole (in.)	1	10	25
	155547	S1805N1	NPN	0-4.0mm	17 x 17 x 1	1.4 x 1.4 x 0.7	0.112	\$9.95	\$8.95	\$7.95
	167020	TS1202N1	NPN	0-1.6mm	12 x 12 x 1	1.8"L x 0.46"Dia.	0.46	14.95	13.49	11.95
	155563	TS1202P1	PNP	0-1.6mm	12 x 12 x 1	1.8"L x 0.46"Dia.	0.46	14.95	13.49	11.95
	155571	TS1805N1	NPN	0-4mm	18 x 18 x 1	1.6"L x 0.70"Dia.	0.7	19.95	17.95	15.95
	155580	T3010N2	NPN	0-8mm	30 x 30 x 1	2.0"L x 1.17"Dia.	1.17	24.95	22.49	19.95

Servollo 0.125% Pressure Sensor

- Pressure range: 0 5 psi
- · Maximum load pressure: 2x rate pressure
- Output voltage: 0 4.5V
- Operating voltage: 5V@10mA
- · Pressure type: gauge pressure
- Pressure media: non-corrosive gas
- Accuracy: ±0.125 psi at 25°C; ±0.250 psi at -10 to 65°C
- · High level output, on-chip signal conditioned, temperature compensated, and calibrated pressure transducers • 1/8" tubing applicable
- Applications: industrial process control, medical equipment, environmental controls
- Size: 0.6"L x 0.5"W x 0.2"H

Part No.	Product No.	1	10	100
173657	XFPN-050-KPGT1	\$12.95	\$11.49	\$9.95

Servollo 0.5% Pressure Sensor

0 – 7 psi

- Pressure range: 0 7 psi
- Max. load pressure: 1.5x rated pressure
- Input excitation: 1.5mA
- Span output: 60-140mV
- Bridge resistance: 5KΩ ±1KΩ
- Accuracy: ±5% full scale
- · High output, accuracy and
- stability · Low noise Applications: industrial
- process control, medical equipment, environmental controls
- 1/8" diameter tubing is applicable
- Size: 0.5"L x 0.5"W x 0.2"H

Part No.	Product No.	1	10	100
163731	FPM07PG \$9.	95	\$8.95	\$6.95

JAMECO Latched Hall Effect Sensor

Complimentary Open Collector Output

- Operating voltage: 20Vcc @ 25mA max.
- SP (south pole) = on; NP (north pole) = off
- · Output compatible with all digital logic families

a a.g.	tai rogio rarrimos				
Part No.	Product No.	1 1	0	100	100
140401	LIMOO	¢ 70 ¢ 4	_	¢ 40	¢ ጋ

JAMECO Latched Hall Effect Sensor · Supply voltage:

- 20Vcc @ 4mA (typical)
- Supply voltage range: 2.4 to 20V
- · SP (south pole): on; NP (north pole): off Max. operating point: <130 (gaues)
- · Max. release point: <-130 (gaues) Dort No. Droduct No.

Part No.	Product No.	10	100	1000
174043	HI-300\$. 75	\$.59	\$.45	\$.29

JAMECO Flex Sensor

Nominal resistance: 10KΩ

- Maximum resistance is $30 \text{K}\Omega$ to $40 \text{K}\Omega$ proportional to the sensor as it flexes or bends
- Applications: virtual reality data gloves, robotic, bio-metric, physics and engineering

Part No.	Description 1	10	100
150551	Flex sensor\$10.95	\$9.95	\$8.49



48

Part

Number

187952 187961

187979

187987

187995

188007

188015

188023

188031

OMRON General Purpose Switches

Actuator

- Common terminal position: screw terminal
- Rated voltage: 15A @ 250VAC

Product

Number

Z-15GD-B

Z-15GK355-B

Z-15GQ21-B

Z-15GQ22-B

Z-15GQ55-B

Z-15GW22-B

Z-15GW2-B

Z-15GW-B

Z-15GQ-B

Dimensions: 1.94"L x 0.69"W x 0.95"H

· Contact form: SPDT

Service life: 20 million cycles (mechanical); 500,000 cycles (electrical)

Short spring plunger

Panel mount roller lever

Panel mount roller lever

Panel mount plunger

Hinge roller lever

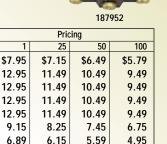
Hinge lever

Short hinge roller lever

Panel mount cross roller lever

Spring plunger





5.95

7.19

6.59

7.95

7.25

5.39

6.49

188824



187987







OMROD D2F Series Subminiature Snap-Action Switches

Super compact ideal for PCB mounting. Ideal for a wide variety of applications from household appliances and office equipment to audio and communications equipment.

5 6

9

8

TIT

7 7 7

- Capable of switching 3A, 1A and 0.1A loads
- Dimensions: 0.50"L x 0.23"W x 0.26"H
- Long life span assured by high-precision dual spring reverse-action mechanism
- Flux penetration prevented by using an insert terminal and allowing a height difference at the case bottom

1 IGA	That ported that provented by dailing air insort terminar and anothing a noight airie once at the case societies									
Part	Product				Contact	Pricing				
Numbe	r Number	Actuator	Contact Type	Model	OF	1	25	50	100	
1888	32 D2F-01F	Pin plunger	Microvoltage/ current	Low force	75g	\$1.09	\$.99	\$.89	\$.79	
1888	24 D2F-01	Pin plunger	Microvoltage/ current	Standard	150g	1.09	.99	.89	.79	
1888	16 D2F	Pin plunger	General purpose	Standard	150g	1.09	.99	.89	.79	
1888	11 D2F-01L	Hinge lever	Microvoltage/ current	Standard	80g	1.19	1.09	.99	.85	
1888	59 D2F-FL	Hinge lever	General purpose	Low force	25g	1.19	1.9	.99	.85	
1888	57 D2F-L	Hinge lever	General purpose	Standard	80g	1.19	1.09	.99	.89	

JAMECO 16-Button Keypad

JAMECO 12-Button Keypad

- · Rugged metal type
- 7-position PCB solder pads
- Tactile type keypad
- Contact rating: 24VDC @ 20mA
- Contact resistance: 200Ω max.
- · Life test: 1,000,000 cycles per key · Metal chrome body
- Size: 2.8"L x 2.2"W x 0.6"H
 Weight: 0.3 lbs. Part No. Description 10

171491 12-button keypad......\$19.95 \$17.95 \$15.95

JAMECO 12-Button Keypad Switch

- · Telephone type
- 8-pin 0.100" header
- Tactile type keypad Color: white
- · Contact rating: 12VDC @ 20mA
- Contact resistance: 200Ω max.
- · Life test: 1,000,000 cycles per key
- Size: 2.8"L x 2.2"W x 0.6"H Weight: 0.1 lbs.

Part No. Description 10 100

153488 12-button keypad switch \$5.95 \$5.35 \$4.49

Temperature Switches

- · Operational life: 100,000 cycles
- Contact resistance: $50m\Omega$ or less



AMECO



· 4x4 matrix type

Contact rating:

 200Ω max.

169244

24VDC @ 20mA

Contact resistance:

Life test: 1,000,000 life cycles per key

16-button keypad.

Description

• Size: 3.0"L x 2.8"W x 0.6"H • Weight: 0.2 lbs.

Information at Your Fingertips

Log on to our web site for specials,

technical tips and expanded

product information

· 8-position solder pad



.\$6.95

ameco.com

\$6.25 \$5.59





169682 Fig. 1

169674 Fig. 2

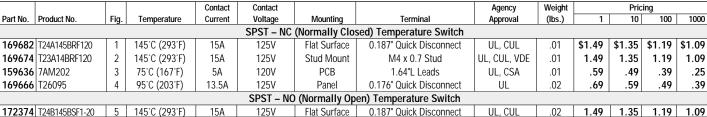
159636 Fig. 3

169666 Fig. 4

172374 Fig. 5

99.7% Stock

Availability!



Call for **OEM** Pricina

Order On-Line www.jameco.com



103190

187995





188015









· 9-pin 0.100" headers

snap-dome contact

24VDC @ 10mA resistive

· Life test: 3,000,000 cycles per key

103190 Header housing (10-pin)

100765 Header pin (10 per pack)

• Compatible with MOS, TTL and DTL (10Ω max.)

Recommended connector: P/N 103190 header

· Fully sealed

For indoor or

outdoor use

· Contact rating:

Part No. Description



16-Button Keypad Switch

Aluminum Instrumentation Knobs (1/8" and 1/4" Shaft Diameters)

2

3

· Includes set screw for secure attachment

· Weight: 0.1 lbs.

Part No.

162464

162481

138384

162499

162472

138481

138501

138510

138384: • Coarse surface for sensitive control

Product No.

K5-1/8S

K5-1/4S

KD500G

K5-1/4B

K5-1/8B

KN031

KN032

KN033



162481 Fig. 1

Shaft

Dia. (in.)

.125

250

.125

250

125

250

.250



Height

.56

.56

.63

.56

.56

.65

.75

Size (in.)

Dia.

.50

.50

.50

.50

.50

.61

.87

1.18



\$.99

1.25

1.25

1.25

1.25

1.49

1.95

.99



\$.85

1.09

1.09

1.09

1.09

1.25

1.65

101573

.85

100

\$.59

.59

.89

.89

89

.89

1.09

(1/4" Shaft Diameters)





167353

167361

10

102787

102787/104176:

104176 138392 • Fits 0.25" shafts • Weight: .02 lbs.

· Brass insert and set screw for strength and durability

JAMECO Instrumentation Knobs

 Compatible with all Jameco rotary switches (left) 136240: • Used with 1/2 watt and 2 watt linear taper

potentiometers (pg 45 & 46) 138392: • Brass insert, dual set screws

Black knob with inset chrome top	
----------------------------------	--

N	ASON	Pressu	re Swi	tche	 S
138392	PKG90B	.85"D x .5	6"H .89	.75	.59
136240	KN145	.54"D x .5	2"H .79	.65	.49
104176	KN143★	.75"D x .4	9"H .69	.59	.49
102787	KN141★	1.25"L x .5	4"H \$.59	\$.49	\$.39
Part No.	Product No.	Size	1	10	100

JAMECO Rotary Switches

- Mounting hole diameter = 3/8"
- · Make before break
- · Solder lugs
- Contact rating: 30VDC @ 0.3A
- · Panel mount · Washer and nut included
- Compatible with Jameco rotary knobs P/N 102787 and 104176 (pg 49) • Material: solid brass bushings, slotted aluminum shafts, plated frame,

Description

Silver position pointer

Silver position pointer

Silver position pointer

White position pointer

White position pointer

Black position pointer

Black position pointer

Black position pointer

phenolic contact wafer (except for P/N 101565 – plastic casing) Contact resistance: 30mΩ

Part No. Pr

· Weight: 0.06 lbs.

Part No.	Product No.	Layers	Poles	Pos.	Ins. Res. (min.)	Lug Size (in.)	Shaft Size (LxD)	1	10	100
101531	RS026	1	1	12	10ΜΩ	.07	0.46" x 0.25"	\$1.19	\$.95	\$.75
101573	RS022	1	2	6	10ΜΩ	.07	0.46" x 0.25"	1.19	.95	.75
101565	RS023	1	3	4	10ΜΩ	.07	1.16" x 0.25"	1.19	.95	.75
101557	RS024	1	4	3	10ΜΩ	.07	0.46" x 0.25"	1.19	.95	.75

Grayhill Single Deck Rotary Switch

Panel mount

· 1/8" screwdriver slotted shaft

- · 36° angle of throw
- Single pole, 5-positions
- · Non-shorting
- Fixed stop
- Contact resistance: $20M\Omega$ max.
- Insulation resistance: 1,000M Ω minimum between mutually insulated parts
- · Material: stainless steel shaft and detent contact springs; brass terminals (gold plated over nickel plate); zinc, cadmium plated busing
- · 0.06" solder terminals

Part No.	Product No. 1	10	100
184727	50AB36-01-1-5-F \$4.95	\$4.49	\$3.95

, **JAMECO** Magnetic Reed Switches



- · Can be activated with rare earth magnet (P/N 167100, pg 82)
- · SPST (single pole single throw)

171871:

• Rating: 500mA @ 100VDC

NO (normally open)

• Size: 1.73"L x 0.1"Dia. (length includes leads)

164081:

- Rating: 1A @ 250VAC; 1A @ 50VDC
- Size: 2.35"L x 0.2"Dia. (length includes leads)

Part No.	Product No.	1	10	100	1000
171871	MKA141011015	\$.79	\$.65	\$.55	\$.45
164081	MRS1	99	.85	.65	.49



Part No. Product No. Circuit

4 PSI SPST-NO/SPDT

per square inch) rising

· Proof pressure: 750 PSI

Current rating: 5 amps

Media connection:

1/8" NPT male brass

· Electrical connection:

· Weight: 0.2 lbs.

8-32 screw terminals

Set point tolerance: ±1 PSI or 5%

• Max. operating pressure: 250 PSI

· Snap action switch

 Factory preset Pressure: 4 PSI (pounds)

167353 NASM2C4R832 SPDT \$12.95 \$11.49 \$9.95 167361 NASM2A4R832 SPST-NO 12.95 11.49

JAMECO° PCB Plunger Switch

No Shorting Block to Lose

- SPST (on/off)
- · Contact rating: 50mA @ 24VDC
- · Non-removable plunger
- Size: 0.2"W x 0.1"D x 0.38"H

· Lead length: 0.1"L Part No. Description

* 10 piece minimum 10 100 1000 \$.19 172700 Plunger switch \$.15

Tactile Switches

- · Switching capacity: 50mA @ 12VDC resistive load
- Bounce time: 10 msec. Weight: .01 lbs.
- * 10 piece minimum



















* 10 pied	e minimum		5		Fig. 1		Fig. 2	2	Fig. 3	Fig. 4	Fiç	g. 5	Fig. 6		Fig. 7
Part No.	Product No.	Fig.	Pins	Туре	Dimensions (L" x W" x D")	Lea A"	d Spac	cing C"	Contact Rating	Lead Type	Button Color	1	10	100	250
137189	PBS103	1	4	SPST off-(on)	.47 x .47 x .17	.20	.50	_	50mA @ 12VDC	PC	Black	\$.29	\$.25	\$.19	\$.15
122972	DTS1212	1	4	SPST off-(on)	.47 x .47 x .18	.20	.50	—	20mA @ 15VDC	PC	Black	.29	.25	.19	.15
119010	KTIIBICM	2	4	SPST off-(on)	.24 x .24 x .15	.17	.25	.03	20mA @ 15VDC	PC	Black	*	.21	.17	.13
153251	SDTX620K★	2	4	SPST off-(on)	.24 x .24 x .15	.17	.25	.06	150mA @ 12VDC	PC	Black	.29	.25	.15	.12
149948	KT11P4CM	2	4	SPST off-(on)	.24 x .24 x .15	.17	.25	.17	20mA @ 15VDC	PC	Black	*	.19	.15	.12
115086	KIE22	3	2	SPST off-(on)	.24 x .24 x .22	—	.25	—	20mA @ 15VDC	PC	Blue	*	.19	.12	.10
155248	KRS-3550-BK	4	2	SPST off-(on)	.24 x .14 x .15	—	.27	—	50mA @ 12VDC	PC	Black	.35	.29	.25	.15
155256	KRS-3550-WH	4	2	SPST off-(on)	.24 x .14 x .15	—	.27	—	50mA @ 12VDC	PC	White	.35	.29	.25	.15
175652	PBS35	5	4	SPST off-(on)	.31 x .31 x .10	.20	.35	—	20mA @ 15VDC	PC	Black	*	.19	.15	.12
155379	KRS-1273B	5	4	SPST off-(on)	.47 x .47 x .14	.17	.53	.14	50mA @ 12VDC	PC	Brown	.39	.29	.25	.19

				Tactile Sv	witch Caps	j
art No	Product No.	Fia.	Description	Size (inches)	Material	Ī

Part No.	Product No.	Fig.	Description	Size (inches)	Material	For Use With	Color	1	10	100	250
155389	KRS-CAP-A	6	Tactile switch cap (square)	.47"L x .47"W x .16"H	Plastic	P/N 155379 (above)	Black	*	\$.15	\$.12	\$.09
155408	KRS-CAP-B	7	Tactile switch cap (round)	.5"Dia. x .25"H	Plastic	P/N 155379 (above)	Black	*	.15	.12	.09



Product No.

DS463R

DS450R

DS463B

DS450B

DS466R

DS471R

MS402R

MS402B

DS016B

DS131B

MS3120R

NS801LR

DS412R

DS430B

NS801MOB

Part No.

164486

164494

164507

164515

164523

164558

164566

164574

164582

164611

164638

164654

164671

106112

164689

Nountain Push Button Switches

 Contact rating: 3A @ 125VAC except P/N 106112 (3A @ 110VAC) () momentary

Dimensions

1.2"L x .59"Dia.

1.2"L x .59"Dia.

1.2"L x .59"Dia.

1.2"L x .59"Dia.

1.2"L x .60"Dia.

.73"L x .22"Dia.

.76"L x .27"Dia.

.88"L x .46"Dia.

.97"L x .80"Dia.

1.1"L x .31"Dia.

1.3"L x .31"Dia.

1.1"L x .59"Dia.

.63"L x .66"Dia.

1.03"L x .55"Dia.

1.24"L x .75"W x .6"D

Lead type: solder terminal except P/N 106112 (solder lugs)
 2-pins

SPST off-(on)

SPST off-(on)

SPST off-on

SPST off-on

SPST off-(on)

Туре

Fig.

1

1

2

4

4

5

9



\$2.49

2.49

1.69

1.89

2.49

1.69

\$1.49

1.49

1.49

1.59

\$.89

2.49

\$1.19

1.49

.99







1000

\$1.89

1.89

1.39

1.59

1.89

1.39

\$1.15

.99

1.15

1.29

\$.55

1.75

\$.85

.99

.65

100

\$2.09

2.09

1.49

1.69

2.09

1.49

\$1.25

1.25

1.25

1.39

\$.69

1.95

\$.89

1.09

.79

Pricing

10

\$2.29

2.29

1.59

1.79

2.29

1.59

\$1.39

1.39

1.39

1.49

\$.79

2.25

\$.99

1.39

.89



Figure 5

Figure 4





Figure 6



Figure 8



Figure 10

Figure 11

APEM® Push Button and Toggle Switches

172144/172110: 600H/600NH Series (Full Toggle Switches)

- Initial contact resistance: $10m\Omega$ max. • Insulation resistance: $1000M\Omega$ min. @ 500VDC
- · Dielectric strength: 2000Vrms min. · Mounting hole: 1/2" dia.
- 172144: Lever type flat • 172110: Lever type - round







172144 (Fig. 1)

172110 (Fig. 2) 171758 (Fig. 3)

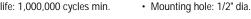
171758/171766: IP Series (Full Push Button Switches)

- Initial contact resistance: $50m\Omega$ max. • Insulation resistance: $1G\Omega$ min. @ 500VDC • Panel mount
- · Dielectric strength: 1500Vrms min. • Mechanical life: 1,000,000 cycles min.

SPST Off-(On)

UL approved

1.20"







171774: AV Series (Full Push Button Switch)

- Initial contact resistance: $10m\Omega$ max. • Insulation resistance: 1000 M Ω min.
- · Dielectric strength: 1000Vrms min.
- · Panel mount · Mounting hole: 3/4" dia.

Miniature Soft Touch Switches

Standard Touch Switches

Standard Switches

Molded Plastic Switches

Lead

Spacing

.175

.175"

.175"

.175

196"

210'

078"

.078"

.220"

.366"

.175"

.175"

.213"

.275"

Mounting

Hole

.387

387

.387"

.387

.377"

382

.190"

.190"

.354"

.647"

.268"

.268"

.468"

750

487"

Button

Color

Red

Red

Black

Black

Red

Red

Red

Black

Black

Black

Red

Red

Black

Red

Black

Lead Spacing Part Pricing Dimensions Product Type Contact Lead Fig Number Number Pins Description W В Rating 1 10 100 250 Type 600H/600NH Series (Full Toggle Switches) 172144 631NH/2 1 2 SPST On-Off 1.16" 0.47" 0.60" 0.58" 15A @ 250VAC Fast-On \$3.95 \$3.49 \$2.95 \$2.49 172110 641H/2 2 4 DPST On-Off 1.17" 0.84" 0.80" | 0.45" 0.58" 15A @ 250VAC Fast-On 4.95 4.49 3.95 3.49 IP Series (Full Push Button Switches) 171758 IPR3SAD2 3 2 SPST Off-(On) 0.46" 0.19" 0.2A @ 250VAC Solder 8.95 7.95 6.95 5.95 0.82" 4 2 0.69" 0.19" 171766 IPC3SAD6 SPST Off-(On) 0.82" 0.46" 0.2A @ 250VAC Solder 8.95 7.95 6.95 5.95 AV Series (Full Push Button Switch)

Slide Switches

171774

• Two mounting flanges • Top actuation

AV191003C900

• Black nylon actuator • Phenolic insulated • Metal housing

5

2

· Weight: 0.01 lbs. † Plastic housing – flanges



0.37"

0.87"



2A @ 48VDC



Screw



8.95



7.95



6.95



5.95

					Dir	Dimensions		Lead			Length	Height				
Part No.	Product No.	Pins	Туре	Description	L"	W"	D"	Spacing (A")	Contact Rating	Lead Type	of Leads	Actuator	1	10	100	250
161808	S102	3	SPDT on-on	PC mount	.78	.41	.31	.20	6.0A @ 125VDC	SIP .70"	.26"	.07"	\$.25	\$.22	\$.19	\$.12
109170	SW153	3	SPDT on-on	PC mount	.22	.45	.23	.12	0.5A @ 50VDC	Solder pins	.17"	.15"	.35	.29	.22	.17
138886	SW141	3	SPDT on-on	PC panel mount	.55	.90	.29	.25	5.0A @ 125VDC	Solder pins	.38"	.39"	.59	.49	.35	.29
169842	SW380	3	SPDT on-on	PC panel mount	.88	.54	.25	.21	10.0A @ 125VDC	Solder pins	.31"	.33"	.79	.69	.59	.49
161816	SW300A†	6	DPDT on-on	PC mount	38	14	13	11	0.1A @ 20VDC	Solder pins	11"	08"	.59	.49	.39	.29



Basic Precision Switches (Type SS/VS)

- 3 terminals: common; normal closed; normal open
- Dielectric strength: 1000VAC 50/60Hz for 1 min.
- Insulation resistance: 100MQ min. (@ 500VDC)
- Type: NO-NC common







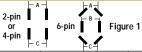
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Part	Product			Contact	Service	Life		Agency		Pricing	
Number	Number	Description	Rating	Resistance (initial)	Mechanically	Electrically	Terminals Type	Approval	1	10	100
159599	SS0505A	Subminiature	5A @ 125VAC	30milli Ω max.	10 million	200,000	.127" quick discon.	UL	\$1.95	\$1.49	\$.99
159572	VS10N051C	Micro (T90S1D12-12)	10A @ 250VAC	15milli Ω max.	10 million	100,000	.183" quick discon.	UL/CSA	1.95	1.49	.99
159581	VS10N021C2	Micro	10A @ 250VAC	15milliΩ max	10 million	100.000	183" guick discon	UL/CSA	1.95	1.49	.99

Full Size Toggle Switches

(Panel Mount)

• Mounting hole diameter: 1/2"

· Full-size round lever • Medium duty toggle switches (current range to 6 amp)



† Lead wires

• Keyed plate indicates switch position • Weight: .05 lbs.

П						Din	nensi	ons	Lea	d Spa	cing			Lever				
Ц	Part No.	Product No.	Fig.	Pins	Type/Description	L"	W"	D"	A"	B"	C"	Contact Rating	Lead Type	Type	1	10	100	250
	76241	SWM128	1	2	SPST on-off w/ on/off plate	1.00	.56	.52	.23	_	_	4A @ 125VAC & 2A @ 250VAC	Solder lugs	Round	\$1.09	\$.89	\$.69	\$.45
	158060	JKN32	1	4	DPST on-off w/ on/off plate	1.00	.56	.52	.23	_	.23	4A @ 125VAC & 2A @ 250VAC	Solder lugs	Round	1.09	.89	.69	.45
	76259	SWM126	1	6	DPDT on-on w/ on/on plate	1.12	.77	.60	.30	.60	.40	5A @ 125VAC & 3A @ 250VAC	Solder lugs	Round	1.09	.89	.69	.49
	158078	JKN3CC	1	6	DPDT on-on w/ on/on plate	1.19	.76	.73	.44	.59	.44	10A @ 125VAC & 6A @ 250VAC	Screw lugs	Round	1.25	.99	.79	.59
	76232	SWM125	2	2†	SPST on-off w/ on/off plate	1.00	.53	.51	_	_	_	6A @ 125VAC & 3A @ 250VAC	6" lead wire	Round	1.29	1.05	.84	.61

Miniature Toggle Switches

• Mounting hole diameter: 1/4" • () momentary











• Includes mounting hardware • Weight: .02 lbs.

					Dir	nensi	ons	Lea	id Spa	cing			Lever				
Part No.	Product No.	Fig.	Pins	Туре	L"	W"	D"	A"	B"	C"	Contact Rating	Lead Type	Туре	1	10	100	250
76523	JMT113★	3	2	SPST on-off	.52	.32	.38	_	.185	 —	6A @ 125VAC & 3A @ 250VAC	Solder lugs	Round	\$1.09	\$.89	\$.69	\$.55
21936	JMT123★	3	3	SPDT on-on	.52	.32	.38	_	.185	 —	5A @ 125VAC & 2A @ 250VAC	Solder lugs	Round	1.09	.89	.69	.49
21910	JMT121★	3	3	SPDT on-off-on	.52	.32	.38	_	.185	_	5A @ 125VAC & 2A @ 250VAC	Solder lugs	Round	1.09	.89	.69	.55
22832	LFH123	3	3	SPDT on-on	.52	.28	.36	_	.185	 —	5A @ 125VAC & 2A @ 250VAC	Solder lugs	Flat	1.09	.89	.69	.49
75854	SWM132	3	3	SPDT on-on	.52	.32	.38	_	.185	_	6A @ 125VAC & 3A @ 250VAC	Solder lugs	Round	1.09	.89	.69	.55
75889	SWM129	3	3	SPDT (on)-off-(on)	.52	.32	.38	_	.185	_	6A @ 125VAC & 3A @ 250VAC	Solder lugs	Round	1.09	.89	.69	.55
26331	MPC123	3	3	SPDT on-on	.52	.32	.37	_	.185	 —	6A @ 125VAC & 3A @ 250VAC	PC	Round	1.15	.95	.75	.59
26315	MPC121	4	3	SPDT on-off-on	.52	.32	.37	_	.185	 —	5A @ 125VAC & 2A @ 250VAC	PC	Round	1.21	1.05	.79	.55
71597	SWM148	5	3	SPDT on-on	.52	.32	.38	_	.185	.20	5A @ 125VAC & 2A @ 250VAC	PC right angle	Round	1.11	.92	.63	.48
75871	SWM145	6	3	SPDT on-on	.32	.52	.38	_	.185	.20	6A @ 125VAC & 3A @ 250VAC	PC right angle	Round	1.13	.92	.72	.58
22841	LFH221	3	6	DPDT on-off-on	.52	.52	.38	.20	.185	 —	3A @ 125VAC & 1A @ 250VAC	Solder lugs	Flat	1.09	.89	.69	.55
21979	JMT223★	3	6	DPDT on-on	.52	.52	.38	.20	.185	 —	5A @ 125VAC & 2A @ 250VAC	Solder lugs	Round	1.09	.89	.69	.55
22859	LFH223	3	6	DPDT on-on	.52	.52	.38	.20	.185	 —	5A @ 125VAC & 2A @ 250VAC	Solder lugs	Flat	1.09	.89	.69	.55
105814	SWA208	3	6	DPDT on-(on)	.52	.52	.38	.20	.185	_	5A @ 125VAC & 2A @ 250VAC	Solder lugs	Round	1.09	.89	.69	.49
75900	SWM133	3	6	DPDT on-on	.52	.52	.38	.20	.185	 —	6A @ 125VAC & 3A @ 250VAC	Solder lugs	Round	1.09	.89	.69	.49
21952	JMT221★	3	6	DPDT on-off-on	.52	.52	.38	.20	.185	_	6A @ 125VAC & 3A @ 250VAC	Solder lugs	Round	1.09	.89	.69	.55
75951	SWM130	3	6	DPDT (on)-off-(on)	.52	.52	.38	.20	.185	_	6A @ 125VAC & 3A @ 250VAC	Solder lugs	Round	1.09	.89	.69	.49
26366	MPC223	3	6	DPDT on-on	.52	.52	.38	.20	.185	_	5A @ 125VAC & 2A @ 250VAC	PC	Round	1.09	.89	.59	.45
26358	MPC221	3	6	DPDT on-off-on	.52	.52	.38	.20	.185	_	5A @ 125VAC & 2A @ 250VAC	PC	Round	1.09	.89	.69	.49

Subminiature Toggle Switches

• Mounting hole diameter: 7/32" • Includes mounting hardware

• Metal construction • Pre-tinned leads • Weight: .01 lbs.

Figure 7







Figure 9



H					Din	nensic	ons	Lead	spacing			Lever				
Part No	Product No.	Fig.	Pins	Туре	L"	W"	D"	Α"	В"	Contact Rating	Lead Type	Type	1	10	100	250
10606	7 SWP124	7	3	SPDT on-on	.25	.33	.40	.20	.10	0.4VA Max.	PC right angle	Round	\$1.49	\$1.25	\$.99	\$.79
72160	SW1501	8	2	SPST on-off	.33	.21	.33	_	.10	1.5A @ 250VAC	Solder lugs	Round	1.09	.89	.69	.55
75969	SWM136	8	3	SPDT on-on	.33	.21	.33	_	.10	3A @ 125VAC	Solder lugs	Round	1.09	.89	.69	.49
72557	SW1502	8	3	SPDT on-off-on	.33	.21	.33	_	.10	1.5A @ 250VAC	Solder lugs	Round	.99	.79	.59	.45
13890	7 SW1503	8	6	DPDT on-off-on	.36	.37	.33	.17	.10	3A @ 120VAC	Solder lugs	Round	.99	.79	.59	.45
75977	SWM137	9	6	DPDT on-on	.33	.37	.33	.17	.10	1.5A @ 250VAC	Solder lugs	Round	.99	.79	.59	.45

Push Button Switches

- Alt = alternate action () momentary
- P/N 95177: Quick connect/solder/right angle leads
- P/N 163352: Push button door switch

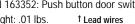




Figure 10



Figure 11



Figure 12



Figure 13



Figure 14



Figure 15



· Weight: .01 lbs.

				Mounting		Dimensions	Lead S	pacing			Button				
Part No.	Product No.	Fig.	Pins	Hole Dia.	Туре	(L" x W" x D")	A"	B"	Contact Rating	Lead Type	Color	1	10	100	250
71642	SWB210	10	2	7/32"	SPST off-(on)	.20 x .33 x .36	.20	.20	1A @ 120VAC	PC right angle	Black	\$1.49	\$1.25	\$.99	\$.69
26622	MS102★	11	2	1/4"	SPST off-(on)	.65 (D) x 1.10 (E)	_	.14	3A @ 125VAC	Solder lugs	Red	.49	.39	.32	.25
26649	MS103★	11	2	1/4"	SPST on-(off)	.65 (D) x 1.10 (E)	_	.17	3A @ 125VAC	Solder lugs	Black	.49	.39	.32	.25
154878	PS11-123	12	3	1/4"	SPST on-(on)	.50 x .27 x .37		.14	5A @ 125VAC	Solder, right angle	Red	.59	.49	.39	.25
121304	CK8121	13	3	1/4"	SPDT on-(on)	.52 x .27 x .38	_	.185	1A @ 120VAC	Solder lugs	White	3.49	2.95	2.49	2.15
28062	PB126	13	3	1/4"	SPDT on-(on)	.52 x .28 x .38	_	.185	5A @ 120VAC	Solder lugs	Red	3.49	2.95	2.49	2.25
174414	R13-510A	16	2	1/2"	SPST off-(on)	.67 (L) x .31 (D)	_	.167	3A @ 125VAC	Solder lugs	Red	1.09	.89	.69	.55
22200	J1881	14	2†	3/8"	SPST on-off, Alt	.65 x .52 x .40	.25	_	2A @ 14VDC	5" Pigtail	White	1.09	.89	.69	.55
22218	J1882	14	2†	3/8"	SPST off-(on)	.65 x .52 x .40	.25	_	2A @ 14VDC	5" Pigtail	Red	1.09	.89	.69	.55
163352	23101MX1	15	2	7/16"	SPST off-(on)	1.1 x .51 x .35	_	_	1A @ 28VDC	Solder lugs	White	.25	.19	.12	.09





DIP Switches





38842



139011



38800



- · Switch contacts: SPST
- · Pre-tinned leads • Easy activation • 50VDC @ 100mA • Wt.: .06 lbs.
- · Switches are numbered
- · Molded construction
- · Standard-raised lever (not on LP switches)
- LP low profile lever (switch is flush to casing)

Col	Compatible Jameco Socket Chart (pg 59)											
Switch	Socket	Switch	Socket	Switch	Socket							
109057	112192	38834	37161	38797	38607							
38818	51570	38842	37372	38800	39378							
139002	51570	139011	37372									
38826	37161	101856	38113									

Part Number	Product Number	No. of Pos.	1	10	100	1000
109057	206-2	2	\$.79	\$.65	\$.55	\$.45
38818	206-4	4	.79	.65	.55	.45
139002	206-4LP	4	.79	.65	.55	.45
38826	206-6	6	.79	.65	.55	.45
38834	206-7	7	.79	.65	.55	.45
38842	206-8*	8	.81	.67	.57	.47
139011	206-8LP	8	.79	.65	.55	.45
101856	206-9	9	.65	.55	.45	.29
38797	206-10	10	.99	.75	.55	.39
38800	206-12	12	1.15	1.05	.95	.85

JAMECO Tri-State DIP Switch

- Switch contacts: bussed, tri-state
- · Labeled tri-state positions (+, 0, -)
- 24VDC @ 25mA
- Two isolated busses Pre-tined leads
- Compatible socket, use P/N 37372 (pg 59)

ООППРО	companies societ, aso 1711 07072 (pg 07)										
Part	Product	No. of		Prici	ing						
Number	Number	Pos.	1	10	50	100					
138991	ETA108E	8	\$1.95	\$1.75	\$1.49	\$1.15					

Mini Push-Button Binary Switch

- Operating temperature: -10°C to +65°C
- 28VDC @ 10A Straight PCB
- · 0.12" character height
- · Snap together
- Break before make
- · Positive logic ("0" all open output)
- Size: .59"L x .30"W x 1.0"D
- · Weight: .01 lbs.

Product Part

Number Number Description

136557 MX061 10 pos. straight BCD..\$3.49 \$2.95 \$2.49



Binary Coded Pricing Decimal (BCD) Switch

(2 switches shown) Pushbutton and Thumbwheel Switch Specifications:

 Contact resistance: 100mΩ max. Break before make
 0.15A @ 50VAC/28VDC

Gold plated BE-CU alloy contacts

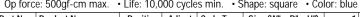
- 1/16" maximum panel thickness Continuous load: 1 amp max.

 - Operating temperature: -40°C to +85°C

Part No.	Product No.	Description	Size (L" x W" x D")	Char. Height	1	10	50	100
26788	MX72	10-position push-button	1.3 x 0.4 x 1.0	0.19"	\$3.95	\$3.75	\$3.49	\$3.25
26761	MXEP2	End plates for MX72		_	.99	.85	.69	.55
26817	MX83	10-position thumbwheel	1.1 x 0.1 x 1.5	0.25"	3.95	3.75	3.49	2.95
26770	MXEP3	End plates for MX83	_	_	.99	.85	.69	.55

Excell Rotary DIP Switches

- Gold plated contacts to ensure reliable, low resistance connection
- · Molded-in terminals and fully sealed construction · Terminals: PC pin leads
- · Material: 94V-0 grade, UL approved fire retardant plastic
- · Max. load rating (switching): 25mA @ 24VDC
- On force: 500qf-cm max Life: 10,000 cycles min Shape: square Color: blue



op foroc: ooogi offi max:		LII0. 10,0	oo oyon	5 mm. 0	or. blue				
Part No.	Product No.	Position	Adjust	Code Type	Size (W" x D" x H")	1	10	50	100
139635	ERD110RS(DRD10)	10	top	BCD	0.39 x 0.39 x 0.20	\$2.95	\$2.49	\$2.25	\$1.95
139651	ERD116RS	16	top	Hex	0.39 x 0.20 x 0.39	2.95	2.49	2.25	1.95

C&K Rocker and Lever Type Switches

- · Contact rating: 5A @ 120VAC; 2A @ 250VAC
- Electrical life: 50,000 make and break cycles at full load Contact resistance: $10milli\Omega$ typical
- Insulation resis.: $10M\Omega$ min. Dielectric strength: 1000 VRMS @ sea level Operating temperature: -30° C to 85° C









• () momentary





173500

3.25

100

\$1.75

2.95

See page 169 for computer cases!

10

181788

140530 (Vertical)

155045 (Horizontal)

163344

163336

				Dime	nsions	(ins.)	Lead			Pri	cing	
Part No.	Product No.	Pins	Туре	L	W	D	Spacing	Lead Type	1	10	100	1000
181788	RA910VBBOV	2	SPDT on-off	.88	.47	.71	.265"	Panel mt. solder eyelet	\$.65	\$.45	\$.39	\$.29
140530	CK7101	3	SPDT on-on	.50	.50	.27	.150"	Right angle PC (vert)	1.25	1.05	.89	.75
155045	CK7101A3	3	SPDT on-on	.50	.50	.27	.185"	Right angle PC (horz)	.65	.45	.39	.29
163344	CKD103J5W	3	SPDT on-off-on	.67	.47	.59	.200"	Panel mt. solder eyelet	.45	.39	.29	.19
163336	CK7201J60	6	DPDT on-on	.50	.45	.35	.200"	Panel mt. lead pins	.45	.39	.29	.19
173500	300DP7	6	DPST - n(f)-f/(n)	.50	.45	.34	.200"	Panel mt. solder eyelet	.65	.49	.35	.25

JAMECO SPST Round Keylock Switches

- Key removable from 2 positions Use for computer replacement • Includes mounting nut • Recommended for security systems
- Mounting
- · Two keys

Thumbwheel

Binary Coded

hole = 0).75" except F	/N 1066	49 = 0.5	5"	100			_
	tht: 0.2 lbs.	,,,		•	1066	19	1	105831
oduct No.	No. Flat, Dia.	Length	Style	Terminal	Voltage/Current	1	10	50
54B	2, .21"	.55"	SPST	Barrel	125VAC/3A	\$2.95	\$2.49	\$2.25



See pages 2-4, 48 and 53 for our new line of **Omron** Products

Decimal (BCD) Switch

· Weight: .01 lbs.

Switches snap together

Front snap tab mounting



174238 PC push button 0.04.....1.95 1.75 1.25 PC Toggle Switch For many desktop

PC Push Button Switch

Alternate action switch (DP)

· 127044: 250V @ 7.5A

• 174238: 250V @ 8A

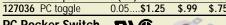
UL/CSA/VDE approved

• Size: 0.9"L x 0.7"W x 0.9"D

Part No. Description Wt. (lbs.)

- and large tower cases DPST • 250V @ 10A
- UL/CSA/VDE approved • Size: 1.2"L x 0.7"W x 1.1"D

Part No. Description Wt. (lbs.)



127044 PC push button 0.04....\$1.95 \$1.75 \$1.25

FAL (SE

PC Rocker Switch

- · For mini-tower cases · DPST
- UL/CSA approved 250V @ 10A
- Size: 0.9"L x 1.2"W x 1.4"D

Wt. (lbs.) Description 127028★ PC rocker 0.03....\$1.49 \$1.25









139651

CRYDOM Solid State Relays

Type DC/AC

Number Number

127790 D2W202F

184428 CX240D5

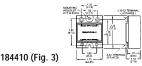
184410 D1D40

184410: Mosfet Type

184604: Triac Type SIP 184428: SCR Type SIP Product Coi







4428	(Fig.	2)		1.79 (45.10
------	-------	----	--	----------------

~		o , po o					•		•	(44.45)	(47.4)	
	Control	Contact	Contact	Contact			Terminal	Size		Pricing		
	Voltage	Style	Voltage	Current	Pins	Fig.	Туре	(L" x W" x H")	1	10	50	
	3.0 to 28VDC	SPST	240VDC	2A	4	1	solder lead	1.7 x 0.4 x 1.3	\$7.95	\$7.19	\$6.49	
	15 to 32VDC	SPST	280VAC	5A	4	2	solder lead	1.7 x 0.3 x 1.0	9.95	8.95	7.95	
	3.5 to 28VDC	SPST	100VDC	40A	4	3	screw term	1.9 x 1.8 x 1.1	64.95	58.49	52.95	

GORDOS Digital I/O Module Mounting Boards

- Plug-compatible logic connections on 8, 16, 24 and 32 position boards
- · Screw terminal barrier block for load connections
- Resident pull-up resistors 5 amp field-replaceable fuses

Туре

PB-4

PB4R

PB-8

PB-16

PB16T

 LEDs indicate logic status All even numbered logic connectors are logic ground

Positions

4

Δ

8

16

16

184479

184487

- · Compatible with "SM" series modules
- · Input and output modules accepted interchangeably
- · Operate with 5, 15 or 24 volt logic supplies
- Captive-screw retaining system for standard size modules and "Quad-Packs"



188234



\$32.49

32.49

54.95

89.49

95.49

10

188251

Potter & Brumfield Relay Sockets

184479: 27E121

Part No.

188234

188242

188251

188269

188277

· SMT screw terminal socket for KUEP/KUGP/KUMP/KUP

Prod. No.

21F854

98F820

21F855

21F856

94F4618

184487/184495: 27E122/27E123

· SMT screw terminal for KAP/KRP/KRPA

184516: 27E891

- · Screw terminal socket for KUEP/KUGP/KUMP/KUP
- Din rail Snap mount

184508: 27E893

· Screw terminal socket for KAP/KRP/KRPA

 Din rail 	 Snap mo 	unt			
Part No.	Product No.	Screw Term	1	10	50
184479	27E121	9	\$8.49	\$7.59	\$6.79
184487	27E122	8	4.95	4.49	3.95
184495	27E123	11	7.49	6.75	5.95
184516	27E891	8	6.49	5.79	5.25
184508	27E893	9	9.95	8.95	7.95

(P

Dimensions (LxWxH)

3.37" x 0.61" x 2.40"

3.37" x 0.63" x 2.40"

2.05" x 1.61" x 0.83"

3.09" x 1.12" x 1.18"

2.83" x 0.90" x 1.22"

2.83" x 1.16" x 1.22"

GORDOS Digital I/O Modules

\$34.95

35.95

59.95

99.95

105.95



Size (LxW)

4.5" x 3.5"

4.5" x 3.5"

8.0" x 3.5"

14.1" x 3.5"

14.1" x 3.5"











184591 IDC 184567

- · Industry standard package and pinout
- · 4,000Vrms optical isolation
- · Capacitance: 8pF typical (input/output)

Wt.(lbs)

0.3

03

0.4

0.9

0.9

- · Color coded by function
- · Continuous duty
- · High immunity to false operation

ļ	Part No.	Prod. No.	Description	Input Voltage	Output Voltage	1	10	50
	184541	ODC-5	DC output (red)	5VDC	3 to 60VDC @ 3A	\$9.95	\$8.95	\$7.95
	184559	ODC-24	DC output (red)	24VDC	3 to 60VDC @ 3A	9.95	8.95	7.95
	184524	OAC-5	AC output (black)	5VDC	120VAC @ 3A	9.95	8.95	7.95
	184532	OAC-24	AC output (black)	24VDC	120VAC @ 3A	11.95	10.75	9.75
	184583	IDC-5	DC input (white)	3.3 to 32VDC	5VDC	9.95	8.95	7.95
	184591	IDC-24	DC input (white)	3.3 to 32VDC	24VDC	10.95	9.95	8.95
	184567	IAC-5	AC input (yellow)	120VAC/VDC	5VDC	8.95	7.95	7.19
	184575	IAC-24	AC input (yellow)	120VAC/VDC	24VDC	9.95	8.95	7.95

OMRON Relay Sockets

- · 187581/187590: Track mounted socket for G2R-1 series
- · 187602: Track mounted socket for MK series
- · 187611: Track mounted socket for LY1 series
- · 187629: Front mounted socket for MY2 series
- 187637: Front mounted socket for MY4 series



	-
187611	187637

1	25	50	1
\$3.59	\$3.25	\$2.89	1
5.95	5.39	4.79	1
4.65	4.19	3.69	1
4.95	4.55	3.95	1
E 2E	1 4 5	115	1 1

OMRON G6B Power PCB Relays

- Contact material: AgCdO · Carry current: 5A
- Low power comsumption (200mW)
- Contact rated load: 5A @ 250VAC, 5A @ 30VDC resistive load (p.f.=1); 2A @ 250VAC, 2A @ 30VDC
- G6B1114: SPST-NO • G6B2114: SPST-NO + SPST-NC



187371 G6B2214PUSDC5

Part	Product	Coil	Coil	Coil		Pricing	
Number	Number	Volt (VDC)	Curr (mA)	Ohms	1	25	50
187291	G6B1114PUSDC12	12	16.7	720	\$4.25	\$3.79	\$3.39
187303	G6B1114PUSDC24	24	8.3	2880	4.25	3.79	3.39
187311	G6B1114PUSDC5	5	40	125	4.25	3.79	3.39
167281	G6B2114PUSDC12	12	25	480	4.95	4.49	3.95
187338	G6B2114PUSDC24	24	12.5	1920	5.25	4.69	4.19
187346	G6B2114PUSDC5	5	60	83.3	4.95	4.49	3.95
187354	G6B2214PUSDC12	12	25	480	4.95	4.49	3.95
187362	G6R2214PHSDC24	24	12.5	1920	5 25	4 69	⊿ 19



Part No. Product No.

187581 P2RF-05-E

187590 P2RF-08-E

187602 PF083A-E

187611 PTF08A-E

187629 PYF08A-E

187637 PYF14A-E

4.95

83.3

3.95

Relays 54

Part

Number Number

Magnecraft Type Reed Relays

Cross

 Coil voltage: 5VDC 183935: diode reversed 183943/183960/183978: diode

183935 R1C5DR W172DIP5

183943 R2A5D W171DIP25

183951 RP1A5 W107DIP1

183960 RP1A5D W107DIP5

Product Magnecraft



\$8.95

7.95

3.95

4.49

4.49





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14 1	3	9	8
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183978 S1A5D W117SIP6 500 SPST-NO 200 **Potter & Brumfield Type Power Relays**

Termination: • Quick connect (Ock conn)
• Solder/quick connect (S/qck conn)
• Solder/plug-in (S/plug-in)

Resistance

200

200

500

500

Contact

Form

SPDT

DPST-NO

SPST-NO

SPST-NO

Contact

Voltage

100

200

200

200

Contact

Current

.25A

.25A

.5A

.5A

.5A



P<u>kg</u>.

DIP

DIP

DIP

DIP

SIP

Jameco

Socket

37161

37161

37161

37161

Pin

8

8

8

8



Pricing

\$7.95

6.95

3.55

3.95

3.95

10

50

\$6.95

6.25

3.19

3.55

3.55







183791 GHZC12DA		n/quick connect (S n/quick connect (older (P/sol			Fig. 2	455	Fig.	3	Fig. 4	4	Fig.5	
183786 GIACCAA PROTIDGOT2 1 ZUVAC	Part	Product	P&B		Coil	Coil	Contact	Contact	Contact					Pricing	
183791 GHZC120A	Number	Number	Cross Ref.	Fig.	Voltage	Resistance	Form	Voltage	Current	Term	Туре	Termination	1	10	50
183896 CH2C2D	183775	GH2C24A	PRD11AG024	1	24VAC	12	DPDT	240VAC/28VDC	30A		Power	Screw term	\$29.95	\$26.95	\$23.95
183812 GTSC124A															23.95
183821 CISTIC 20A											_				19.95
183839 GTST12120															19.95
18389 GISTICZD											_				11.25
183856 GS2C24A											_				11.25 11.25
183863 GTS2C210A											_				11.25
183876 GSC2/120															11.95
183898 GHPDT24A KUHPT105124 2 24VDC 472 DPDT Z9VACZ9XDC SA 12 Gen pwr 18399 GHPDT24A K1517A12210 3 12VDC 600 4PDT 12VACZ9XDC 5A 12 Gen pwr 194,95 39,95 183997 GMH4PDT12DF K1517A1212 3 12VDC 600 4PDT 12VACZ9XDC 5A 12 Gen pwr 194,95 39,95 183927 GMH4PDT12DF K1517D1212 3 12VDC 650 4PDT 12VACZ9XDC 5A 12 Gen pwr 194,96 14,95 39,95 183927 GMH4PDT12DF K1517D1212 3 12VDC 650 4PDT 12VACZ9XDC 5A 12 Gen pwr 194,96 14,95 39,95 183926 GLDPDT12A K1517D1224 3 24VDC 650 4PDT 12VACZ9XDC 5A 12 Gen pwr 194,96 14,95 37,95 183996 GLDPDT12A K1617D13120 4 12VDC 650 APDT 12VACZ9XDC 5A 8 Power Splug-in 4.95 37,95 183906 GLDPDT12D K10P11D15120 4 12VDC 660 DPDT 12VACZ9XDC 5A 8 Power Splug-in 8.95 7.69 184014 GLDPDT24D K10P11D15124 4 24VDC 660 DPDT 12VACZ9XDC 5A 8 Power Splug-in 8.49 7.69 184013 GLPPDT24D K10P11D1524 4 24VDC 660 DPDT 12VACZ9XDC 5A 8 Power Splug-in 8.49 7.69 184034 GLSPDT12AD K10P11D1524 4 24VDC 660 DPDT 12VACZ9XDC 5A 8 Power Splug-in 8.49 7.69 184034 GLSPDT12AD K10P11D1524 4 24VDC 660 DPDT 12VACZ9XDC 5A 8 Power Splug-in 8.49 7.69 184034 GLSPDT12AD K10P11D1524 4 24VDC 660 DPDT 12VACZ9XDC 5A 8 Power Splug-in 8.49 7.69 184034 GLSPDT12AD K10P11D1524 4 24VDC 660 DPDT 12VACZ9XDC 5A 8 Flange Sqck com 8.79 7.95 184034 GLSPDT12AD K10P11D1524 4 24VDC 660 DPDT 12VACZ9XDC 15A 8 Flange Sqck com 8.79 7.95 184034 GLSPDT12AD K10P11D152A 4 24VDC 660 DPDT 12VACZ9XDC 15A 8 Flange Sqck com 8.79 7.95 184034 GLSPDT12AD K10P11D152A 4 24VDC 660 DPDT 12VACZ9XDC 15A 8 Flange Sqck com 8.79 7.95 184034 GLSPDT12AD K10P11D152A 4 24VDC 660 DPDT 12VACZ9XDC 16A 8 Flange Sqck com 8.79 7.95 184034 GLSPDT12AD K10P11D152A 4 24VDC 660 DPDT 12VACZ9XDC 16A 8 Flange								240VAC/28VDC			_				11.95
183991 GMH-MPDT2AF KHST7A12120 3 24VAC 160 4PDT 120VACZ2WDC 5A 12 6en pwr Flug-in 44.95 39.95 183919 GMH-MPDT12DF KHST7D1212 3 12VDC 160 4PDT 120VACZ2WDC 5A 12 6en pwr Flug-in 44.95 39.95 183991 GMH-MPDT12DF KHST7D1212 3 24VDC 650 4PDT 120VACZ2WDC 5A 12 6en pwr Flug-in 41.95 37.95 183996 GLDPDT12A K10P11A1512 4 12VAC 43 0PDT 120VACZ3WDC 15A 8 Power Splug-in 8.49 7.69 183994 GLDPDT12AD K10P11D1512 4 12VDC 160 0PDT 120VACZ3WDC 15A 8 Power Splug-in 8.49 7.69 184014 GLDPDT24D K10P11D1512 4 24VDC 160 0PDT 120VACZ3WDC 15A 8 Power Splug-in 8.49 7.69 184022 GLPDPDT12D K10P11D1512 4 24VDC 650 0PDT 120VACZ3WDC 15A 8 Power Splug-in 8.49 7.69 184025 GLSDPDT24A K10P11A15120 4 24VDC 650 0PDT 120VACZ3WDC 15A 8 Power Splug-in 8.49 7.69 184035 GLSDPDT24A K10P11A15120 4 12VDC 650 0PDT 120VACZ3WDC 15A 8 Power Splug-in 8.49 7.69 184035 GLSDPDT24A K10P11A15120 4 12VDC 650 0PDT 120VACZ3WDC 15A 8 Power Splug-in 8.49 7.69 184035 GLSDPDT24A K10P11A15120 4 12VDC 650 0PDT 120VACZ3WDC 15A 8 Flange Syck conn 8.95 7.95 184055 GLSDPDT12DA K10P11D1512 4 12VDC 160 DPDT 120VACZ3WDC 15A 8 Flange Syck conn 8.95 7.95 184055 GLSDPDT24D K10P11D1512 4 12VDC 650 DPDT 120VACZ3WDC 15A 8 Flange Syck conn 8.95 7.95 184051 GLSDPDT24D K10P11D1512 4 12VDC 650 DPDT 120VACZ3WDC 15A 8 Flange Syck conn 8.95 7.95 184051 GLSDPDT24D K10P11D152 4 12VDC 650 DPDT 120VACZ3WDC 15A 8 Flange Syck conn 8.95 7.95 184051 GLSDPDT24D K10P11D152 4 12VDC 650 DPDT 120VACZ3WDC 15A 8 Flange Syck conn 8.95 7.95 184051 GLSDPDT24D K10P11D152 4 12VDC 650 DPDT 120VACZ3WDC 15A 8 Flange Syck conn 8.95 7.95 184051 GLSDPT24D K10P11D152 4 12VDC 650	183871	GTS2C12D	KUHP11D5112	2	12VDC	120	DPDT	240VAC/28VDC	20A		Power	Qck conn	14.95	13.49	11.95
183991 GMH4PDT120F KHST7A12120															11.95
183997 GMH-MPDT120F KHST/D1212 3 24VDC 650 APDT 120VAC/28VDC 5A 12 Gen pwr Plug-in 41.95 37.95 183996 GLDPDT12A K10P11A1512 4 12VAC 43 0PDT 120VAC/30VDC 15A 8 Power Sylug-in 8.49 7.69 183994 GLDPDT12DA K10P11D1512 4 12VDC 160 0PDT 120VAC/30VDC 15A 8 Power Sylug-in 8.49 7.69 184016 GLDPDT24D K10P11D1512 4 12VDC 160 0PDT 120VAC/30VDC 15A 8 Power Sylug-in 8.49 7.69 184022 GLPDPDT12D K10P11D1512 4 12VDC 160 0PDT 120VAC/30VDC 15A 8 Power Sylug-in 8.49 7.69 184021 GLPDPDT24D K10P11D15512 4 12VDC 160 0PDT 120VAC/30VDC 15A 8 Power Sylug-in 8.49 7.69 184031 GLPDPT24D K10P11D1552 4 24VDC 160 0PDT 120VAC/30VDC 15A 8 Power Sylug-in 8.49 7.69 184045 GLSDPDT24D K10P11A15120 4 12VDC 160 0PDT 120VAC/30VDC 15A 8 Flange Syck conn 8.95 7.95 184055 GLSDPDT120A K10P11D1512 4 12VDC 160 0PDT 120VAC/30VDC 15A 8 Flange Syck conn 8.95 7.95 184053 GLSDPDT24D K10P11D1512 4 24VDC 650 0PDT 120VAC/30VDC 15A 8 Flange Syck conn 8.95 7.95 184053 GLSDPDT24D K10P11D1512 4 24VDC 650 0PDT 120VAC/30VDC 15A 8 Flange Syck conn 8.95 7.95 184053 GLSDPDT24D K10P11D1512 4 24VDC 650 0PDT 120VAC/23VDC 15A 8 Flange Syck conn 8.95 7.95 184053 GLSDPDT24D K10P11D1512 4 24VDC 650 0PDT 120VAC/23VDC 15A 8 Flange Syck conn 8.95 7.95 184053 GLSDPDT24D K10P11D1524 4 24VDC 650 0PDT 120VAC/23VDC 15A 8 Flange Syck conn 8.95 7.95 184053 GLSDPDT24D KRPA11AG21 4 24VDC 650 0PDT 230VAC/23VDC 10A 8 Octal Plug-in 14.95 14.95 184154 GVPDDT24D KRPA116C120 4 12VDC 120 DPDT 230VAC/23VDC 10A 8 Octal Plug-in 14.95 14.95 184154 GVPDDT24D KRPA116C120 4 12VDC 120 DPDT 230VAC/23VDC 10A 8 Octal Plug-in 16.95 14.95 1841															35.95
183996 (LDPDT12DA K1971D1524 24 24VDC 650 4PDT 120VAC/3SVDC 5A 12 6en pwr Plug-in 41.95 37.95 183994 (LDPDT12DA K10P11D1512 4 120VAC 33.900 DPDT 120VAC/3SVDC 15A 8 Power S/plug-in 8.95 7.69 184014 (LDPDT12D K10P11D1512 4 12VDC 160 DPDT 120VAC/3SVDC 15A 8 Power S/plug-in 8.95 7.69 184014 (LDPDT24D K10P11D1524 4 24VDC 660 DPDT 120VAC/3SVDC 15A 8 Power S/plug-in 8.49 7.69 184013 (LDPDT24D K10P11D1524 4 24VDC 660 DPDT 120VAC/3SVDC 15A 8 Power PCB mount 8.49 7.69 184013 (LDPDT24D K10P11D1524 4 24VDC 660 DPDT 120VAC/3SVDC 15A 8 Power PCB mount 8.49 7.69 184013 (LDPDT24D K10P11D1524 4 24VDC 660 DPDT 120VAC/3SVDC 15A 8 Power PCB mount 8.49 7.69 184013 (LDPDT24D K10P11D1524 4 24VDC 650 DPDT 120VAC/3SVDC 15A 8 Flange S/qck conn 8.95 7.95 184013 (LDPDT24D K10P11D1524 4 24VDC 650 DPDT 120VAC/3SVDC 15A 8 Flange S/qck conn 8.95 7.95 184013 (LDPDT24D K10P11D1524 4 24VDC 650 DPDT 120VAC/3SVDC 15A 8 Flange S/qck conn 8.95 7.95 184013 (LDPDT24D K10P11D1524 4 24VDC 250 DPDT 230VAC/2SVDC 15A 8 Flange S/qck conn 8.95 7.95 184013 (LDPDT24D K10P11D1524 4 24VDC 250 DPDT 230VAC/2SVDC 15A 8 Flange S/qck conn 8.95 7.95 184013 (LDPDT24D K10P11D1524 4 24VDC 250 DPDT 230VAC/2SVDC 10A 8 Octal Plug-in 16.95 14.95 184129 (MDV24D12D K10P11D1524 4 24VDC 250 DPDT 230VAC/2SVDC 10A 8 Octal Plug-in 16.95 14.95 184159 (MDV24D12D K10P11D1524 4 24VDC 42														35.95	
183996 GLDPDT120A															33.95
184906 GLDPDT12DA K10PT1AT5120 4 120VAC 3900 DPDT 120VAC/30VDC 15A 8 Power S/plug-in 8.49 7.69 184014 GLDPDT42D K10PT1D1524 4 24VDC 660 DPDT 120VAC/30VDC 15A 8 Power S/plug-in 8.49 7.69 184026 GLDPDT12D K10PT1D1524 4 24VDC 660 DPDT 120VAC/30VDC 15A 8 Power S/plug-in 8.49 7.69 184031 GLDPDT24D K10PT1D15524 4 24VDC 660 DPDT 120VAC/30VDC 15A 8 Power PCB mount 8.49 7.69 184031 GLDPDT24D K10PT1D15524 4 24VDC 660 DPDT 120VAC/30VDC 15A 8 Power PCB mount 8.49 7.69 184035 GLDPDT12DA K10PT1AT5120 4 120VAC 3900 DPDT 120VAC/30VDC 15A 8 Flange S/qck conn 8.95 7.95 184055 GLDPDT12DA K10PT1D15124 12VDC 160 DPDT 120VAC/30VDC 15A 8 Flange S/qck conn 8.95 7.95 184053 GLDPDT12DA K10PT1D15124 4 24VDC 650 DPDT 120VAC/30VDC 15A 8 Flange S/qck conn 8.95 7.95 184058 GLDPDT12DA K10PT1D1524 4 24VDC 650 DPDT 120VAC/30VDC 15A 8 Flange S/qck conn 8.95 7.95 184058 GLDPDT12DA K10PT1D1524 4 24VDC 650 DPDT 120VAC/30VDC 15A 8 Flange S/qck conn 8.95 7.95 184058 GLDPDT12DA K10PT1D1524 4 24VDC 250 DPDT 230VAC/28VDC 10A 8 Octal Plug-in 16.95 14.95 184113 GVDPDT12DA KRPA11AG12D 4 12VDC 120 DPDT 230VAC/28VDC 10A 8 Octal Plug-in 16.95 14.95 184158 GVDPDT12DA KRPA11AG12D 4 12VDC 120 DPDT 230VAC/28VDC 10A 8 Octal Plug-in 16.95 14.95 184158 GVDPDT12DA KRPA14D612D 4 12VDC 120 DPDT 230VAC/28VDC 10A 8 Octal Plug-in 16.95 14.95 184158 GVDPDT12DA KRPA14D612D 4 12VDC 120 SPDT 230VAC/28VDC 10A 8 Octal Plug-in 19.95 17.95 184158 GVDPDT12DA KPRA14D612D 4 12VDC 2250 SPDT 230VAC/28VDC 10A 8 Power P/qck conn 19.95 17.95 184158 GVDPDT12DA KPRA14D612D 5 12VDC 910D 230VAC/28VDC 10A 8 Power P/qck conn 19.95											'				33.95 6.89
184006 GLDPDT12D															7.19
184014 GLDPDT24D											_				6.89
18403 GLPPDT12D															6.89
184095 GLSDPDT12DA K10P11AT524 4 24VAC 160 DPDT 120VAC30VDC 15A 8 Flange S/qck conn 8.95 7.95 184065 GLSDPDT12D K10P11DT512 4 12VDC 160 DPDT 120VAC30VDC 15A 8 Flange S/qck conn 8.95 7.95 184073 GLSDPDT12D K10P11DT512 4 12VDC 160 DPDT 120VAC30VDC 15A 8 Flange S/qck conn 8.95 7.95 184081 GVSPDT12DA KRPA5AG120 4 12VDC 2250 SPDT 120VAC230VDC 15A 8 Flange S/qck conn 8.95 7.95 184081 GVSPDT12DA KRPA5AG120 4 12VAC 2250 SPDT 230VAC28VDC 10A 5 Power Plug-in 14.95 13.49 184102 GVDPDT12DA KRPA11G120 4 12VDC 120 DPDT 230VAC28VDC 10A 8 Octal Plug-in 16.95 14.95 184113 GVDPDT12D KRPA11DG120 4 12VDC 120 DPDT 230VAC28VDC 10A 8 Octal Plug-in 16.95 14.95 184143 GVTPDT12DA KRPA11AG24 4 24VAC 85 SPDT 230VAC28VDC 10A 8 Octal Plug-in 16.95 14.95 184145 GVTPDT12DA KRPA11AG24 4 24VAC 85 SPDT 230VAC28VDC 10A 8 Octal Plug-in 16.95 14.95 184145 GVTPDT12DA KRPA11AG120 4 12VDC 120 SPDT 230VAC28VDC 10A 8 Octal Plug-in 19.95 17.95 184153 GVTPDT12D KRPA14DG12 4 12VDC 120 SPDT 230VAC28VDC 10A 11 Octal Plug-in 19.95 17.95 184116 GVTPDT12D KRPA14DG12 4 12VDC 120 SPDT 230VAC28VDC 10A 11 Octal Plug-in 19.95 17.95 184118 GODDDT12DA KRPA14DG12 4 12VDC 120 SPDT 230VAC28VDC 10A 11 Octal Plug-in 19.95 17.95 184118 GODDDT12DA KUP11ATS20 5 12VDC 9110 9100 240VAC28VDC 10A 8 Power P/qck conn 12.95 11.49 184233 GODDDT12DA KUP11ATS20 5 12VDC 9110 9100 9100 240VAC28VDC 10A 8 Power P/qck conn 12.95 11.49 184293 GOSDPDT12DA KUP11DT52 5 12VDC 9110 9100 240VAC28VDC 10A 8 Power P/qck conn 13.95 12.49 184293 GOSDPDT12DA KUP11DT52 5 12VDC 9110 9100 240VAC28VDC 10A 8 Power P/qck conn 13.95 12.49			K10P11D5512					120VAC/30VDC		8	_				6.89
184065 GLSPPDT120A K10P111AT5120 4 120VDC 100 DPDT 120VAC/30VDC 15A 8 Flange S/qck conn 8.95 7.95 184073 GLSPPDT24D K10P11DT524 4 24VDC 650 DPDT 120VAC/20VDC 15A 8 Flange S/qck conn 8.95 7.95 184081 (SVSPDT124D K10P11DT524 4 24VDC 2250 SPDT 220VAC/28VDC 10A 8 DCL Plug-in 16.95 14.95 184103 GVPDT120A KRPA11AG120 4 120VAC 2250 DPDT 230VAC/28VDC 10A 8 OCL Plug-in 16.95 14.95 184112 GVPDT120A KRPA11BG120 4 12VDC 120 DPDT 230VAC/28VDC 10A 8 OCL Plug-in 16.95 14.95 184112 GVPDT124D KRPA11DG24 4 24VDC 472 DPDT 230VAC/28VDC 10A 8 OCL Plug-in 16.95 14.95 184145 GVPDT120A KRPA14AG120 4 12VDC 2250 SPDT 230VAC/28VDC 10A 8 OCL Plug-in 16.95 14.95 184145 GVPDT120A KRPA14AG120 4 12VDC 2250 SPDT 230VAC/28VDC 10A 8 OCL Plug-in 16.95 14.95 184153 GVPDT120A KRPA14AG120 4 12VDC 2250 SPDT 230VAC/28VDC 10A 11 OCL Plug-in 19.95 17.95 184161 GVPDT124D KRPA14DG24 4 24VDC 472 SPDT 230VAC/28VDC 10A 11 OCL Plug-in 19.95 17.95 184161 GVPDT124D KRPA14DG24 4 24VDC 472 SPDT 230VAC/28VDC 10A 11 OCL Plug-in 19.95 17.95 184161 GVPDT124D KUP11DT524 5 24VDC 472 SPDT 240VAC/28VDC 10A 8 Power Pfck conn 12.95 11.49 18429S GOSDPDT12D KUP11DT524 5 24VDC 472 DPDT 240VAC/28VDC 10A 8 Power Pfck conn 12.95 11.49 18429S GOSDPDT12D KUP11DT524 5 24VDC 472 DPDT 240VAC/28VDC 10A 8 Power Pfck conn 12.95 11.49 184258 GOSDPDT12D KUP11DT52 5 12VDC 9110 DPDT 240VAC/28VDC 10A 8 Power Pfck conn 12.95 11.49 184258 GOSDPDT12D KUP11DT52 5 12VDC 9110 DPDT 240VAC/28VDC 10A 8 Power Pfck conn 13.95 12.49 184258 GOSDPDT24A KUP14DT524 5 24VDC 472 DPDT 240VAC/28VDC 10A 8 Power Pfck conn 13.95 12.49 184258 GOS				4		650					Power				6.89
184065 GLSPPDT12D															7.19
184081 (SVPPDT124D KRPA11AG24 4 24VAC 2250 SPDT 230VAC/28VDC 10A 8 Octal Plug-in 14.95 14.95 184192 (SVDPDT124D KRPA11AG24 4 24VAC 2250 SPDT 230VAC/28VDC 10A 8 Octal Plug-in 16.95 14.95 184112 (SVDPDT124D KRPA11DG120 4 12VDC 120 DPDT 230VAC/28VDC 10A 8 Octal Plug-in 16.95 14.95 184121 (SVDPDT124D KRPA11DG120 4 12VDC 120 DPDT 230VAC/28VDC 10A 8 Octal Plug-in 16.95 14.95 184121 (SVDPDT124D KRPA11AG24 4 24VAC 85 DPDT 230VAC/28VDC 10A 8 Octal Plug-in 16.95 14.95 184151 (SVTPDT124D KRPA11AG24 4 24VAC 85 DPDT 230VAC/28VDC 10A 8 Octal Plug-in 16.95 14.95 184151 (SVTPDT120A KRPA11AG24 4 12VDC 472 DPDT 230VAC/28VDC 10A 8 Octal Plug-in 19.95 17.95 184161 (SVTPDT120A KRPA14AG120 4 12VDC 120 DPDT 230VAC/28VDC 10A 11 Octal Plug-in 19.95 17.95 184161 (SVTPDT124D KRPA14DG12 4 12VDC 472 DPDT 230VAC/28VDC 10A 11 Octal Plug-in 19.95 17.95 184161 (SVTPDT24D KRPA14DG12 4 12VDC 472 DPDT 230VAC/28VDC 10A 11 Octal Plug-in 19.95 17.95 184196 (GODPDT120A KUP11A1524 5 12VDC 9110 DPDT 240VAC/28VDC 10A 8 POWER P/qck conn 12.95 11.49 184295 (GODPDT120A KUP11D1512 5 12VDC 9110 DPDT 240VAC/28VDC 10A 8 POWER P/qck conn 11.95 10.49 184221 (SQSPPDT120A KUP11D1524 5 12VDC 9110 DPDT 240VAC/28VDC 10A 8 POWER P/qck conn 11.95 10.49 184221 (SQSPPDT120A KUP11A15120 5 12VDC 9110 DPDT 240VAC/28VDC 10A 8 POWER P/qck conn 11.95 10.49 184250 (SQSPPDT120A KUP11A15120 5 12VDC 9110 DPDT 240VAC/28VDC 10A 8 POWER P/qck conn 11.95 10.49 184250 (SQSPPDT120A KUP11A15120 5 12VDC 9110 DPDT 240VAC/28VDC 10A 8 POWER P/qck conn 11.95 10.49 184250 (SQSPPDT120A KUP14A55120 5 12VDC 9110 DPDT 240VAC/28VDC 10A 8 POWER P/qck conn 11.95 10.49 184250 (SQSPPDT24D KUP14D1524 5 24VDC 472 DPDT 240VAC/28VDC 10A 8 POWER P/qck conn															7.19
184908 GVSPDT120A KRPA1AG24 4 24VAC 85 DPDT 230VAC/28VDC 10A 8 Octal Plug-in 14.95 13.49 184102 GVDPDT120A KRPA11AG120 4 12VDC 120 DPDT 230VAC/28VDC 10A 8 Octal Plug-in 16.95 14.95 14.95 184111 GVDPDT121D KRPA11DG120 4 12VDC 120 DPDT 230VAC/28VDC 10A 8 Octal Plug-in 16.95 14.95 14.95 184137 GVTPDT124A KRPA11DG24 4 24VDC 472 DPDT 230VAC/28VDC 10A 8 Octal Plug-in 16.95 14.95 184137 GVTPDT124A KRPA11AG24 4 24VDC 472 DPDT 230VAC/28VDC 10A 8 Octal Plug-in 16.95 14.95 184153 GVTPDT12D KRPA14AG24 4 24VDC 42VDC 42V															7.19
184090 GVPPDT24A															7.19 11.95
184102 GVPPDT120A															13.49
184111 GVPDPT12D															13.49
184129 GVPDPT124D															13.49
184145 GVTPDT12DA KRPA14AG12D 4 120VAC 2250 3PDT 230VAC/28VDC 10A 11 Octal Plug-in 19.95 17.95 184151 GVTPDT12D KRPA14DG24 4 24VDC 472 3PDT 230VAC/28VDC 10A 11 Octal Plug-in 19.95 17.95 184170 GODTDT24A KUP11AT524 5 24VAC 85 DPDT 240VAC/28VDC 10A 8 Power Proceedings Pro				4	24VDC		DPDT								13.49
184153 GVTPDT12D											Octal				15.95
184161 GVTPDT24D RRPA14DG24 4 24VDC 472 3PDT 230VAC/28VDC 10A 11 Octal Plug-in 19.95 17.95 184170 GODTDT24A KUP11A5120 5 120VAC 2250 DPDT 240VAC/28VDC 10A 8 Power P/qck conn 12.95 11.49 184181 GODPDT12DA KUP11D1512 5 12VDC 9110 DPDT 240VAC/28VDC 10A 8 Power P/qck conn 11.95 10.49 18423 GODPDT12DA KUP11D1524 5 24VDC 472 DPDT 240VAC/28VDC 10A 8 Power P/qck conn 11.95 10.49 184215 GOSPDT12DA KUP11D1712 5 12VDC 9110 DPDT 240VAC/28VDC 10A 8 Power P/qck conn 11.95 10.49 184225 GOSDPDT12DA KUP11D172 5 12VDC 9110 DPDT 240VAC/28VDC 10A 8 Power P/qck conn 11.95 10.49 184209 GOSPDT12DA KUP11D172 5 12VDC 9110 DPDT 240VAC/28VDC 10A 8 Power Ock conn 11.95 10.49 184209 GOSPDT12DA KUP14A1524 5 24VDC 472 DPDT 240VAC/28VDC 10A 8 Power Ock conn 11.95 10.49 184268 GOTPDT12DA KUP14D1512 5 12VDC 9110 3PDT 240VAC/28VDC 10A 10 Power P/qck conn 14.95 13.49 184268 GOTPDT12D KUP14D1512 5 12VDC 9110 3PDT 240VAC/28VDC 10A 10 Power P/qck conn 14.95 13.49 184284 GOSTPDT12D KUP14D1524 5 24VDC 472 3PDT 240VAC/28VDC 10A 10 Power P/qck conn 14.95 13.49 184284 GOSTPDT12D KUP14D1524 5 24VDC 472 3PDT 240VAC/28VDC 10A 10 Power P/qck conn 14.95 13.49 184284 GOSTPDT12D KUP14D1524 5 24VDC 472 3PDT 240VAC/28VDC 10A 10 Power P/qck conn 14.95 13.49 184305 GOSTPDT12D KUP14D1512 5 12VDC 9110 3PDT 240VAC/28VDC 10A 10 Power P/qck conn 14.95 13.49 184305 GOSTPDT12D KUP14D5512 5 12VDC 9110 3PDT 240VAC/28VDC 10A 10 Power P/qck conn 14.95 13.49 184305 GOSTPDT12D KUP14D5512 5 12VDC 9110 3PDT 240VAC/28VDC 10A 10 Power P/qck conn 14.95 13.49 13.49 13.49 13.49 13.49 13.49 13.49 13.49 13.49 13.49 13.49 13.4										1					15.95
184170 GODTDT24A KUP11A1524 5 24VAC 85 DPDT 240VAC/28VDC 10A 8 Power P/qck conn 12.95 11.49 184184 GODPDT12D KUP11D1512 5 12VDC 9110 DPDT 240VAC/28VDC 10A 8 Power P/qck conn 12.95 11.49 184233 GODPDT12D KUP11D1524 5 24VDC 472 DPDT 240VAC/28VDC 10A 8 Power P/qck conn 11.95 10.49 184225 GOSDPDT12D KUP11D1524 5 12VDC 9110 DPDT 240VAC/28VDC 10A 8 Power P/qck conn 11.95 10.49 184225 GOSDPDT12D KUP11D1712 5 12VDC 9110 DPDT 240VAC/28VDC 10A 8 Power Ock conn 12.95 11.49 184220 GOSDPDT24D KUP11D1712 5 12VDC 9110 DPDT 240VAC/28VDC 10A 8 Power Ock conn 11.95 10.49 184241 GOTPDT24A KUP14A1524 5 24VDC 472 DPDT 240VAC/28VDC 10A 8 Power Ock conn 11.95 10.49 184268 GOTPDT12DA KUP14A1512 5 12VDC 9110 3PDT 240VAC/28VDC 10A 10 Power P/qck conn 14.95 13.49 184268 GOTPDT12D KUP14D1512 5 12VDC 9110 3PDT 240VAC/28VDC 10A 10 Power P/qck conn 14.95 13.49 184286 GOTPDT12D KUP14D1512 5 12VDC 9110 3PDT 240VAC/28VDC 10A 10 Power P/qck conn 14.95 13.49 184282 GOSTPDT12D KUP14D1512 5 12VDC 9110 3PDT 240VAC/28VDC 10A 10 Power Ock conn 14.95 13.49 184282 GOSTPDT12D KUP14D1512 5 12VDC 9110 3PDT 240VAC/28VDC 10A 10 Power Ock conn 14.95 13.49 184282 GOSTPDT12D KUP14D5512 5 12VDC 9110 3PDT 240VAC/28VDC 10A 10 Power Ock conn 15.95 14.49 184331 GOSTPDT12D KUP14D5512 5 12VDC 9110 3PDT 240VAC/28VDC 10A 10 Power Ock conn 15.95 14.49 184331 GOSTPDT24D KUP14D5512 5 12VDC 9110 3PDT 240VAC/28VDC 10A 10 Power Ock conn 15.95 14.49 184331 GOSTPDT24D KUP14D5512 5 12VDC 9110 3PDT 240VAC/28VDC 5A 12 Gen pwr P/solder 7.29 6.59 184330 GM4PDT104F KHAU17D1224 3 24VAC 650 4PDT 220VAC/24VDC 5A 12 Gen pwr															15.95
184188 GODPDT12DA KUP11A512D 5 120VAC 2250 DPDT 240VAC/28VDC 10A 8 Power P/qck conn 11.95 10.49 18423 GODPDT24D KUP11D1512 5 12VDC 2250 DPDT 240VAC/28VDC 10A 8 Power P/qck conn 11.95 10.49 184217 GOSDPDT12DA KUP11D1524 5 24VDC 472 DPDT 240VAC/28VDC 10A 8 Power P/qck conn 11.95 10.49 184225 GOSDPDT12D KUP11D172 5 12VDC 9110 DPDT 240VAC/28VDC 10A 8 Power Ock conn 11.95 10.49 18424 GOTPDT24D KUP11D1724 5 24VDC 472 DPDT 240VAC/28VDC 10A 8 Power Ock conn 11.95 10.49 18424 GOTPDT24D KUP14D1512 5 24VDC 472 DPDT 240VAC/28VDC 10A 8 Power Ock conn 11.95 10.49 18425 GOTPDT12DA KUP14D1512 5 12VDC 9110 3PDT 240VAC/28VDC 10A 10 Power P/qck conn 13.95 12.49 18426 GOTPDT24D KUP14D1512 5 12VDC 9110 3PDT 240VAC/28VDC 10A 10 Power P/qck conn 13.95 12.49 184284 GOSTPDT24D KUP14D1512 5 24VDC 472 3PDT 240VAC/28VDC 10A 10 Power P/qck conn 13.95 12.49 184284 GOSTPDT24D KUP14D1524 5 24VAC 85 3PDT 240VAC/28VDC 10A 10 Power P/qck conn 13.95 12.49 184292 GOSTPDT12D KUP14D1524 5 24VAC 85 3PDT 240VAC/28VDC 10A 10 Power P/qck conn 14.95 13.49 184292 GOSTPDT12D KUP14D5512 5 12VDC 9110 3PDT 240VAC/28VDC 10A 10 Power P/qck conn 13.95 12.49 184383 GOSTPDT12D KUP14D5512 5 12VDC 472 3PDT 240VAC/28VDC 10A 10 Power Ock conn 13.95 12.49 184381 GMSPDT12DA KUP14D5512 5 12VDC 472 3PDT 240VAC/28VDC 10A 10 Power Ock conn 13.95 12.49 184381 GMSPDT12DA KUP14D5512 5 12VDC 472 3PDT 240VAC/28VDC 5A 12 Gen pwr P/solder 7.29 6.59 184384 GMSPDT12DF KUP14D5512 3 12VDC 650 4PDT 220VAC/24VDC 5A 12 Gen pwr P/solder 7.29 6.59 184384 GMSPDT24DF KHAU17D1224 3 24VDC 650 4PDT 220VAC/24VDC 5A 12 Gen pwr P/Sold															15.95
184196 GODPDT12D KUP11D1512 5 12VDC 9110 DPDT 240VAC/28VDC 10A 8 Power P/qck conn 11.95 10.49															9.95 9.95
184233 GODPDT24D KUP11D1524 5 24VDC 472 DPDT 240VAC/28VDC 10A 8 Power Ock conn 11.95 10.49 184225 GOSDPDT12D KUP11DT12 5 12VDC 9110 DPDT 240VAC/28VDC 10A 8 Power Ock conn 11.95 10.49 184209 GOSDPDT24D KUP11DT24 5 24VDC 472 DPDT 240VAC/28VDC 10A 8 Power Ock conn 11.95 10.49 184209 GOSDPDT24D KUP14D1512 5 24VDC 472 DPDT 240VAC/28VDC 10A 8 Power Ock conn 11.95 10.49 184209 GOSDPDT24D KUP14D1512 5 24VDC 85 3PDT 240VAC/28VDC 10A 10 Power Property															9.49
184217 GQSDPDT12DA KUP11AT12D 5 120VAC 2250 DPDT 240VAC/28VDC 10A 8 Power Qck conn 12.95 11.49 184225 GQSDPDT12D KUP11DT12 5 12VDC 9710 DPDT 240VAC/28VDC 10A 8 Power Qck conn 11.95 10.49 184241 GQTPDT24D KUP14DT24 5 24VDC 85 3PDT 240VAC/28VDC 10A 10 Power P/qck conn 13.95 12.49 184250 GQTPDT12DA KUP14D1512 5 12VDC 9710 3PDT 240VAC/28VDC 10A 10 Power P/qck conn 13.95 12.49 184268 GQTPDT24D KUP14D1512 5 12VDC 9710 3PDT 240VAC/28VDC 10A 10 Power P/qck conn 13.95 12.49 184268 GQTPDT24D KUP14D1524 5 24VDC 472 3PDT 240VAC/28VDC 10A 10 Power P/qck conn 13.95 12.49 184284 GQSTPDT24D KUP14D524 5 24VDC 472 3PDT 240VAC/28VDC 10A 10 Power P/qck conn 13.95 12.49 184282 GQSTPDT12DA KUP14A55120 5 120VAC 2250 3PDT 240VAC/28VDC 10A 10 Power Qck conn 14.95 13.49 184305 GQSTPDT12DA KUP14D5512 5 12VDC 9710 3PDT 240VAC/28VDC 10A 10 Power Qck conn 14.95 13.49 184313 GQSTPDT24D KUP14D5512 5 12VDC 9710 3PDT 240VAC/28VDC 10A 10 Power Qck conn 13.95 12.49 184321 GM4PDT24DF KHAU17D126 3 24VAC 160 4PDT 220VAC/28VDC 5A 12 Gen pwr P/solder 7.29 6.59 184328 GM4PDT12DF KHAU17D126 3 12VDC 160 4PDT 220VAC/24VDC 5A 12 Gen pwr P/solder 7.29 6.59 184348 GM4PDT12DF KHAU17D1224 3 24VDC 650 4PDT 220VAC/24VDC 5A 12 Gen pwr P/solder 7.29 6.59 184381 GMS4PDT12DF KHAE17D1212 3 24VDC 650 4PDT 220VAC/24VDC 5A 12 Gen pwr PCB mount 7.29 6.59 184381 GMS4PDT12DF KHAE17D1224 3 24VDC 650 4PDT 220VAC/28VDC 5A 12 Gen pwr PCB mount 7.29 6.59 184381 GMS4PDT12DF KHAE17D1224 3 24VDC 650 4PDT 220VAC/28VDC 5A 12 Gen pwr PCB mount 7.29 6.59 184381 GMS4PDT12DF KHAE17D1224 3 24VDC 650 4PDT 220VAC/28VDC 5A 12 Gen															9.49
184225 GOSDPDT12D KUP11DT12 5 12VDC 9110 DPDT 240VAC/28VDC 10A 8 Power Ock conn 11.95 10.49 184209 GOSDPDT24D KUP14DT24 5 24VAC 85 3PDT 240VAC/28VDC 10A 10 Power P/qck conn 13.95 12.49 184268 GOTPDT12D KUP14D1512 5 12VDC 9110 3PDT 240VAC/28VDC 10A 10 Power P/qck conn 14.95 13.49 184284 GOSTPDT24D KUP14D1524 5 24VAC 85 3PDT 240VAC/28VDC 10A 10 Power P/qck conn 13.95 12.49 184284 GOSTPDT24D KUP14D1524 5 24VAC 85 3PDT 240VAC/28VDC 10A 10 Power P/qck conn 13.95 12.49 184284 GOSTPDT24D KUP14A5524 5 24VAC 85 3PDT 240VAC/28VDC 10A 10 Power P/qck conn 13.95 12.49 184284 GOSTPDT12D KUP14D5512 5 120VAC 2250 3PDT 240VAC/28VDC 10A 10 Power Ock conn 14.95 13.49 184305 GOSTPDT12D KUP14D5512 5 120VAC 2250 3PDT 240VAC/28VDC 10A 10 Power Ock conn 13.95 12.49 184301 GM4PDT24AF KHAU17A1224 3 24VAC 3900 4PDT 220VAC/24VDC 5A 12 Gen pwr P/solder 7.29 6.59 183011 GM4PDT12DF KHAU17D1212 3 12VDC 160 4PDT 220VAC/24VDC 5A 12 Gen pwr P/solder 7.29 6.59 184386 GM4PDT12DF KHAU17D1224 3 24VDC 650 4PDT 220VAC/24VDC 5A 12 Gen pwr P/solder 7.29 6.59 184386 GM4PDT12DF KHAU17D1224 3 24VDC 650 4PDT 220VAC/24VDC 5A 12 Gen pwr P/solder 7.29 6.59 184386 GM4PDT12DF KHAU17D1224 3 24VDC 650 4PDT 220VAC/24VDC 5A 12 Gen pwr P/solder 7.29 6.59 184386 GMS4PDT12DF KHAE17D1224 3 24VDC 650 4PDT 220VAC/24VDC 5A 12 Gen pwr P/solder 7.29 6.59 184381 GMS4PDT12DF KHAE17D1224 3 24VDC 650 4PDT 220VAC/24VDC 5A 12 Gen pwr P/solder 7.29 6.59 184381 GMS4PDT12DF KHAE17D1224 3 24VDC 650 4PDT 220VAC/24VDC 5A 12 Gen pwr CB mount 7.29 6.59 184381 GMS4PDT12DF KHAE17D1224 3 24VDC 650 4PDT 220VAC/28VDC 5A 12 Gen pwr											_				9.95
184241 GQTPDT24A KUP14A1524 5 24VAC 85 3PDT 240VAC/28VDC 10A 10 Power P/qck conn 13.95 12.49 184268 GQTPDT12D KUP14D1512 5 12VDC 9110 3PDT 240VAC/28VDC 10A 10 Power P/qck conn 14.95 13.49 184268 GQTPDT24D KUP14D1524 5 24VDC 472 3PDT 240VAC/28VDC 10A 10 Power P/qck conn 13.95 12.49 184269 GQSTPDT24A KUP14A5524 5 24VDC 472 3PDT 240VAC/28VDC 10A 10 Power P/qck conn 14.95 13.49 184292 GQSTPDT12DA KUP14A55120 5 12VDC 9110 3PDT 240VAC/28VDC 10A 10 Power P/qck conn 14.95 13.49 184305 GQSTPDT12DA KUP14D5512 5 12VDC 9110 3PDT 240VAC/28VDC 10A 10 Power Qck conn 14.95 13.49 184331 GQSTPDT24D KUP14D5524 5 24VDC 472 3PDT 240VAC/28VDC 10A 10 Power Qck conn 13.95 12.49 184321 GM4PDT120AF KHAU17A1224 3 24VAC 16O 4PDT 220VAC/24VDC 5A 12 Gen pwr P/solder 7.29 6.59 184330 GM4PDT12DF KHAU17D1212 3 12VDC 160 4PDT 220VAC/24VDC 5A 12 Gen pwr P/solder 7.29 6.59 184336 GM4PDT12DF KHAU17D1212 3 12VDC 160 4PDT 220VAC/24VDC 5A 12 Gen pwr P/solder 7.29 6.59 184366 GMP4PDT12DF KHAU17D1212 3 12VDC 160 4PDT 220VAC/24VDC 5A 12 Gen pwr P/solder 7.29 6.59 184336 GMS4PDT120AF KHAE17D1224 3 24VDC 650 4PDT 220VAC/24VDC 5A 12 Gen pwr P/Solder 7.29 6.59 184336 GMS4PDT120AF KHAE17D1224 3 24VDC 650 4PDT 220VAC/24VDC 5A 12 Gen pwr P/CB mount 7.29 6.59 184381 GMS4PDT120AF —															9.49
184250 GQTPDT120A KUP14A15120 5 120VAC 2250 3PDT 240VAC/28VDC 10A 10 Power P/qck conn 14.95 13.49 184268 GQTPDT12D KUP14D1512 5 24VDC 472 3PDT 240VAC/28VDC 10A 10 Power P/qck conn 13.95 12.49 184284 GQSTPDT12DA KUP14A55120 5 120VAC 2250 3PDT 240VAC/28VDC 10A 10 Power P/qck conn 14.95 13.49 184284 GQSTPDT12DA KUP14A55120 5 120VAC 2250 3PDT 240VAC/28VDC 10A 10 Power P/qck conn 14.95 13.49 184292 GQSTPDT12DA KUP14A55120 5 120VAC 2250 3PDT 240VAC/28VDC 10A 10 Power Qck conn 14.95 13.49 184305 GQSTPDT12DA KUP14D5512 5 12VDC 9110 3PDT 240VAC/28VDC 10A 10 Power Qck conn 15.95 14.49 184313 GOSTPDT24DA KUP14D5524 5 24VDC 472 3PDT 240VAC/28VDC 10A 10 Power Qck conn 13.95 12.49 184321 GM4PDT120AF KHAU17A1224 3 24VAC 160 4PDT 220VAC/24VDC 5A 12 Gen pwr P/solder 7.29 6.59 184330 GM4PDT12DF KHAU17D126 3 6VDC 40 4PDT 220VAC/24VDC 5A 12 Gen pwr P/solder 7.29 6.59 184348 GM4PDT12DF KHAU17D1212 3 12VDC 160 4PDT 220VAC/24VDC 5A 12 Gen pwr P/solder 7.29 6.59 184364 GMP4PDT12DF KHAU17D1224 3 24VDC 650 4PDT 220VAC/24VDC 5A 12 Gen pwr P/solder 7.29 6.59 184364 GMP4PDT12DF KHAE17D1224 3 24VDC 650 4PDT 220VAC/24VDC 5A 12 Gen pwr P/CB mount 7.29 6.59 184381 GMS4PDT120AF —											Power				9.49
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184276 GOTPDT24D KUP14A5524 5 24VDC 85 3PDT 240VAC/28VDC 10A 10 Power Ock conn 13.95 12.49 184284 GOSTPDT12DA KUP14A5524 5 24VAC 85 3PDT 240VAC/28VDC 10A 10 Power Ock conn 14.95 13.49 184292 GOSTPDT12DA KUP14A55120 5 12VDC 250 3PDT 240VAC/28VDC 10A 10 Power Ock conn 14.95 13.49 184305 GOSTPDT12DA KUP14D5512 5 12VDC 9110 3PDT 240VAC/28VDC 10A 10 Power Ock conn 13.95 12.49 184313 GOSTPDT24DA KUP14D5524 5 24VDC 472 3PDT 240VAC/28VDC 10A 10 Power Ock conn 13.95 12.49 184321 GM4PDT12DA KUP14D5524 5 24VDC 472 3PDT 240VAC/28VDC 10A 10 Power Ock conn 13.95 12.49 184321 GM4PDT12DA KHAU17A12120 3 12VDC 160 4PDT 220VAC/24VDC 5A 12 Gen pwr P/solder 7.29 6.59 184348 GM4PDT12DF KHAU17D1212 3 12VDC 160 4PDT 220VAC/24VDC 5A 12 Gen pwr P/solder 7.29 6.59 184348 GM4PDT24DF KHAU17D1212 3 12VDC 160 4PDT 220VAC/24VDC 5A 12 Gen pwr P/solder 7.29 6.59 184364 GMP4PDT12DF KHAE17D1212 3 24VDC 650 4PDT 220VAC/24VDC 5A 12 Gen pwr P/solder 7.29 6.59 184381 GMS4PDT12DF KHAE17D1224 3 24VDC 650 4PDT 220VAC/24VDC 5A 12 Gen pwr P/CB mount 7.29 6.59 184381 GMS4PDT12DF GMS4PDT12D											_				11.95
184284 GQSTPDT24A KUP14A5524 5 24VAC 85 3PDT 240VAC/28VDC 10A 10 Power Qck conn 14.95 13.49 184305 GQSTPDT12DA KUP14D5512 5 12VDC 9110 3PDT 240VAC/28VDC 10A 10 Power Qck conn 13.95 12.49 184313 GQSTPDT24D KUP14D5524 5 24VDC 472 3PDT 240VAC/28VDC 10A 10 Power Qck conn 13.95 12.49 184321 GM4PDT24AF KHAU17A1224 3 24VAC 160 4PDT 220VAC/24VDC 5A 12 Gen pwr P/solder 7.29 6.59 184338 GM4PDT12DF KHAU17D126 3 12VDC 160 4PDT 220VAC/24VDC 5A 12 Gen pwr P/solder 7.29 6.59 184338 GM4PDT12DF KHAU17D1224 3 24VDC 650 4PDT 220VAC/24VDC 5A 12 Gen pwr P/solder 7.29 6.59 184356 GMP4PDT12DF KHAE17D1212 3 12VDC 160 4PDT 220VAC/24VDC 5A 12 Gen pwr P/solder 7.29 6.59 184356 GMP4PDT12DF KHAE17D1212 3 12VDC 160 4PDT 220VAC/24VDC 5A 12 Gen pwr P/solder 7.29 6.59 184364 GMP4PDT24DF KHAE17D1212 3 12VDC 160 4PDT 220VAC/24VDC 5A 12 Gen pwr P/solder 7.29 6.59 184364 GMP4PDT24DF KHAE17D1224 3 24VDC 650 4PDT 220VAC/24VDC 5A 12 Gen pwr P/Solder 7.29 6.59 184372 GMS4PDT24AF															11.25 11.25
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184305 GQSTPDT12D KUP14D5512 5 12VDC 9110 3PDT 240VAC/28VDC 10A 10 Power Qck conn 13.95 12.49 184313 GOSTPDT24D KUP14D5524 5 24VDC 472 3PDT 240VAC/28VDC 10A 10 Power Qck conn 13.95 12.49 184321 GM4PDT120AF KHAU17A1224 3 24VAC 160 4PDT 220VAC/24VDC 5A 12 Gen pwr P/solder 7.29 6.59 184330 GM4PDT12DF KHAU17D126 3 6VDC 40 4PDT 220VAC/24VDC 5A 12 Gen pwr P/solder 7.29 6.59 184348 GM4PDT12DF KHAU17D1212 3 12VDC 160 4PDT 220VAC/24VDC 5A 12 Gen pwr P/solder 7.29 6.59 184348 GM4PDT24DF KHAU17D1224 3 24VDC 650 4PDT 220VAC/24VDC 5A 12 Gen pwr P/solder 7.29 6.59 184356 GMP4PDT24DF KHAE17D1212 3 12VDC 160 4PDT 220VAC/24VDC 5A 12 Gen pwr P/solder 7.29 6.59 184364 GMP4PDT24DF KHAE17D1224 3 24VDC 650 4PDT 220VAC/24VDC 5A 12 Gen pwr P/CB mount 7.29 6.59 184372 GMS4PDT24AF 3 24VAC 160 4PDT 220VAC/28VDC 5A 12 Gen pwr Qck conn 7.29 6.59 184381 GMS4PDT120AF 3 24VAC 3900 4PDT 120VAC/28VDC 5A 12 Gen pwr Qck conn 7.29 6.59 184381 GMS4PDT120AF 3 24VAC 3900 4PDT 120VAC/28VDC 5A 12 Gen pwr Qck conn 7.29 6.59 184381 GMS4PDT120AF 3 24VAC 3900 4PDT 120VAC/28VDC 5A 12 Gen pwr Qck conn 7.29 6.59 184381 GMS4PDT120AF 3 24VAC 3900 4PDT 120VAC/28VDC 5A 12 Gen pwr Qck conn 7.29 6.59 184381 GMS4PDT120AF 3 24VAC 3900 4PDT 120VAC/28VDC 5A 12 Gen pwr Qck conn 7.29 6.59 184381 GMS4PDT120AF 3 24VAC 3900 4PDT 120VAC/28VDC 5A 12 Gen pwr Qck conn 7.29 6.59 184381 GMS4PDT120AF 3 24VAC 3900 4PDT 120VAC/28VDC 5A 12 Gen pwr Qck conn 7.29 6.59 184381 GMS4PDT120AF 3 24VAC 3900 4PDT 120VAC/28VDC 5A 12 Gen pwr Qck conn 7.29 6.59 184381 344881 34881 34881 34881 34881 34881 34881 34881 34881 348											_				12.95
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184321 GM4PDT24AF KHAU17A1224 3 24VAC 3900 4PDT 220VAC/24VDC 5A 12 Gen pwr P/solder 7.29 6.59 184330 GM4PDT12DF KHAU17D1212 3 12VDC 160 4PDT 220VAC/24VDC 5A 12 Gen pwr P/solder 7.29 6.59 184348 GM4PDT24DF KHAU17D1212 3 12VDC 160 4PDT 220VAC/24VDC 5A 12 Gen pwr P/solder 7.29 6.59 184348 GM4PDT24DF KHAU17D1224 3 24VDC 650 4PDT 220VAC/24VDC 5A 12 Gen pwr P/solder 7.29 6.59 184364 GMP4PDT12DF KHAE17D1212 3 12VDC 160 4PDT 220VAC/24VDC 5A 12 Gen pwr P/solder 7.29 6.59 184364 GMP4PDT24DF KHAE17D1224 3 24VDC 650 4PDT 220VAC/24VDC 5A 12 Gen pwr P/solder 7.29 6.59 184364 GMP4PDT24DF KHAE17D1224 3 24VDC 650 4PDT 220VAC/24VDC 5A 12 Gen pwr P/Solder 7.29 6.59 184364 GMP4PDT24DF KHAE17D1224 3 24VDC 650 4PDT 220VAC/24VDC 5A 12 Gen pwr P/Solder 7.29 6.59 184381 GMS4PDT24AF 3 24VAC 160 4PDT 120VAC/28VDC 5A 12 Gen pwr Qck conn 7.29 6.59 184381 GMS4PDT120AF 3 120VAC 3900 4PDT 120VAC/28VDC 5A 12 Gen pwr Qck conn 7.29 6.59 184381 GMS4PDT120AF 3 120VAC 3900 4PDT 120VAC/28VDC 5A 12 Gen pwr Qck conn 7.29 6.59 184381 GMS4PDT120AF 3 120VAC 3900 4PDT 120VAC/28VDC 5A 12 Gen pwr Qck conn 7.29 6.59 184381 GMS4PDT120AF 3 120VAC 3900 4PDT 120VAC/28VDC 5A 12 Gen pwr Qck conn 7.29 6.59 184381 GMS4PDT120AF 3 120VAC 3900 4PDT 120VAC/28VDC 5A 12 Gen pwr Qck conn 7.29 6.59 184381 GMS4PDT120AF 3 120VAC 3900 4PDT 120VAC/28VDC 5A 12 Gen pwr Qck conn 7.29 6.59 184381 3000 3000 4PDT 120VAC/28VDC 5A 12 Gen pwr Qck conn 7.29 6.59 184381 3000 3000 3000 4PDT 120VAC/28VDC 5A 12 3000															11.25
184330 GM4PDT6DF KHAU17D126 3 6VDC 40 4PDT 220VAC/24VDC 5A 12 Gen pwr P/solder 7.29 6.59 184348 GM4PDT24DF KHAU17D1224 3 24VDC 650 4PDT 220VAC/24VDC 5A 12 Gen pwr P/solder 7.29 6.59 184356 GMP4PDT12DF KHAE17D1212 3 12VDC 160 4PDT 220VAC/24VDC 5A 12 Gen pwr P/solder 7.29 6.59 184364 GMP4PDT24DF KHAE17D1224 3 24VDC 650 4PDT 220VAC/24VDC 5A 12 Gen pwr PCB mount 7.29 6.59 184372 GMS4PDT24AF 3 24VAC 160 4PDT 120VAC/28VDC 5A 12 Gen pwr PCB mount 7.29 6.59 184381 GMS4PDT120AF 3 120VAC 3900 4PDT 120VAC/28VDC 5A 12 Gen pwr Qck conn 7.29 6.59 184381 GMS4PDT120AF 3 120VAC 3900 4PDT 120VAC/28VDC 5A 12 Gen pwr Qck conn 7.29 6.59 184381 GMS4PDT120AF 3 120VAC 3900 4PDT 120VAC/28VDC 5A 12 Gen pwr Qck conn 7.29 6.59 184381 GMS4PDT120AF 3 120VAC 3900 4PDT 120VAC/28VDC 5A 12 Gen pwr Qck conn 7.29 6.59 184381 GMS4PDT120AF 3 120VAC 3900 4PDT 120VAC/28VDC 5A 12 Gen pwr Qck conn 7.29 6.59 184381 GMS4PDT120AF 3 120VAC 3900 4PDT 120VAC/28VDC 5A 12 Gen pwr Qck conn 7.29 6.59 184381 GMS4PDT120AF 3 120VAC 3900 4PDT 120VAC/28VDC 5A 12 Gen pwr Qck conn 7.29 6.59									5A	12	Gen pwr				5.95
183011 GM4PDT12DF										12	Gen pwr				5.95
184348 GM4PDT24DF KHAU17D1224 3 24VDC 650 4PDT 220VAC/24VDC 5A 12 Gen pwr P/solder 7.29 6.59 184356 GMP4PDT12DF KHAE17D1212 3 12VDC 160 4PDT 220VAC/24VDC 5A 12 Gen pwr PCB mount 7.29 6.59 184364 GMP4PDT24DF KHAE17D1224 3 24VDC 650 4PDT 220VAC/24VDC 5A 12 Gen pwr PCB mount 7.29 6.59 184372 GMS4PDT24AF 3 24VDC 160 4PDT 120VAC/28VDC 5A 12 Gen pwr PCB mount 7.29 6.59 184381 GMS4PDT120AF 3 120VAC 3900 4PDT 120VAC/28VDC 5A 12 Gen pwr Qck conn 7.29 6.59 184381 GMS4PDT120AF 3 120VAC 3900 4PDT 120VAC/28VDC 5A 12 Gen pwr Qck conn 7.29 6.59 184381 GMS4PDT120AF 3 120VAC 3900 4PDT 120VAC/28VDC 5A 12 Gen pwr Qck conn 7.29 6.59 184381 GMS4PDT120AF 3 120VAC 3900 4PDT 120VAC/28VDC 5A 12 Gen pwr Qck conn 7.29 6.59										12	Gen pwr				5.95
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184364 GMP4PDT24DF KHAE17D1224 3 24VDC 650 4PDT 220VAC/24VDC 5A 12 Gen pwr PCB mount 7.29 6.59 184372 GMS4PDT24AF — 3 24VAC 160 4PDT 120VAC/28VDC 5A 12 Gen pwr Qck conn 7.29 6.59 184381 GMS4PDT120AF — 3 120VAC 3900 4PDT 120VAC/28VDC 5A 12 Gen pwr Qck conn 7.29 6.59										12	Gen pwr	P/SOIGET			5.95
184372 GMS4PDT24AF								220VAC/24VDC		12	Gen nwr	PCB mount			5.95 5.95
184381 GMS4PDT120AF			—							12	Gen nwr				5.95
			_												5.95
	184399	GMS4PDT6DF	_	3	6VDC	40	4PDT	120VAC/28VDC	5A	12	Gen pwr	Qck conn	7.29	6.59	5.95
183020 GMS4PDT12DF 3 12VDC 160 4PDT 120VAC/28VDC 5A 12 Gen pwr Qck conn 7.29 6.59				3	12VDC	160	4PDT	120VAC/28VDC	5A	12	Gen pwr	Qck conn	7.29	6.59	5.95
184401 GMS4PDT24DF 3 24VDC 650 4PDT 120VAC/28VDC 5A 12 Gen pwr Qck conn 7.29 6.59	184401	GMS4PDT24DF	_	3	24VDC	650	4PDT	120VAC/28VDC	5A	12	Gen pwr	Qck conn	7.29	6.59	5.95

Small High Current PC Mount T7C/T72/T81H/T90/RKA/VR15 Series Relays

An inexpensive means of switching loads up to 30 amps. While these small, low-cost relays are designed primarily for the appliance industry and heating, ventilating and air conditioning markets, they are also well suited for automotive load management and other applications.

- Electrical life expectancy is 100,000 operations at rated loads
- · PC board terminals
- · Meets UL class F insulation standard
- Mechanical life expectancy is 10 million operations
- Dielectric strength: 1,500Vrms (between contact and coil)
- · Weight: .06 lbs. Terminal type: PCB solder
- · Operating temperature:
- 134949: -40°C to +85°C; 104926/129349: -40°C to +125°C
- 104926: Open frame relay
- 129349: Immersion cleanable, plastic sealed case
- 144186: For use with universal relay card (P/N 128910 pg 115)



1349









144186 (Fig. 3)











49	145752
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174457

174385 174431

Part	Jameco	Potter & Brumfield		Coil	Coil							Pri	ina	$\overline{}$
Number	Product Number	Cross Reference	Fig.	Voltage	(Ohms)	Style	Contact Voltage	Contact Current	Pins	LxWxH(in.)	1	10	50	100
174431	LEG12F	T7CS5D12	_	12VDC	400	SPDT	120VAC/24VDC	15A	5	.76 x .62 x .60	\$1.49	\$1.29	\$1.19	\$1.09
174422	LEG-24	T725D16424	_	24VDC	1600	SPDT	240VAC/24VDC	10A	5	.76 x .62 x .60	1.39	1.19	1.09	.99
174449	LU-5	T81H5D215	_	5VDC	125	SPDT	120VAC/24VDC	1A/2A	6	.60 x .40 x .45	1.95	1.79	1.59	1.39
174457	LU-12	T81H5D2112	_	12VDC	720	SPDT	120VAC/24VDC	1A/2A	6	.60 x .40 x .45	1.95	1.79	1.59	1.39
134949	FKD130PSDC5V	T90S5D12-5	1	5VDC	27	SPDT	240VAC/28VDC	30A	6	1.3 x 1.1 x .80	2.25	1.95	1.75	1.49
145752	T90S1D12-12	T90S1D12-12	1	12VDC	155	SPST	240VAC	30A	5	1.2 x 1.0 x .77	2.95	2.49	2.25	1.95
104926	733SPDT12VDC	T90N5D12-12	2	12VDC	155	SPDT	240VAC/28VDC	20A/10A	6	1.2 x .90 x .63	2.49	2.25	1.95	1.49
129349	832-IC-S	T90S5D12-12	1	12VDC	155	SPDT	277VAC/28VDC	20A/10A	6	1.2 x 1.0 x .75	2.49	2.25	1.95	1.49
173690	L90-24	T90N5D12-24	2	24VDC	660	SPDT	277VAC/30VDC	20A	6	1.1 x .90 x .55	2.25	1.95	1.75	1.49
173569	L90-24W	T90S5D1224	1	24VDC	660	SPDT	277VAC/30VDC	20A	6	1.2 x 1.1 x .77	2.49	2.25	1.95	1.75
174393	LM1-12D	RKA5DG12	_	12VDC	270	SPDT	250VAC/30VDC	10A	5	1.2 x .48 x 1.0	2.49	2.25	1.95	1.75
174377	LM2-12D	RKA5DZ12	_	12VDC	270	DPDT	250VAC/30VDC	5 A	8	1.2 x .48 x 1.0	2.49	2.25	1.95	1.75
174406	LM1-24D	RKA5DG24	_	24VDC	1100	SPDT	250VAC/30VDC	10A	5	1.2 x .48 x 1.0	2.49	2.25	1.95	1.75
174385	LM2-24D	RKA5DZ24	_	24VDC	1100	DPDT	250VAC/30VDC	5 A	8	1.2 x .48 x 1.0	2.49	2.25	1.95	1.75
144186	JZC-22F	VR15M121C	3	12VDC	337	SPDT	120VAC/28VDC	15A	5	0.8 x .64 x .80	2.95	2.49	2.25	1.95

Low Cost PC Board or Panel Mount Only

- Mechanical life expectancy is 10 million operations
- · Weight: 0.1 lbs.

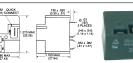
137365/137357: • Operating temperature: -55°C to +85°C

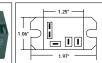
· Dielectric strength: 1500VAC (between open contacts)

137349: • Operating temperature: -40°C to +70°C

• Dielectric strength: 1200VAC (between open contacts)

T9 <i>F</i>	\ Ser	ies F	≀ela	ays





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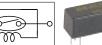
137365	137357	13734

			(,										
Part Jameco		Jameco	Potter & Brumfield	Coil	Coil			Contact					Prici	ng	
Nu	mber	Product No.	Cross Reference	Voltage	(Ohms)	Style	Contact Voltage	Current	Pins	Terminal Type	LxWxH(in.)	1	10	50	100
13	7365	953-IC-12DA	T9AS5D22-12	12VDC	155	SPDT	240VAC/28VDC	NO: 20A	5	PCB Solder (5)	1.25 x 1.0 x 1.25	\$2.75	\$2.49	\$2.25	\$1.95
								NO: 10A		.25" disconnect (2)					
13	7357	953-IC-12DM	T9AS5D52-12	12VDC	155	SPDT	240VAC/28VDC	NO: 20A	5	.1" disconnect (2)	2.0 x 1.6 x 1.8	2.95	2.49	2.25	1.95
								NO: 10A		.25" disconnect (2)					1
13	7349	949-1A-12D	T9P1D52-12	12VDC	120	SPST (NO)	250VAC/28VDC	30A	4	.25" disconnect (2)	2.0 x 1.25 x 1.25	3.95	3.49	2.95	2.49
						, ,				.187" disconnect (2)					1

Reed Type Relays

- Dielectric strength: 500VDC (between contact and coil)
- Operating temperature: -35°C to +85°C
- · Normally open (NO), normally closed (NC) · Weight: .01 lbs.







168356





P	art	Product		Coil	Coil								Pric	ing	
N	lumber	Number	Manufacturer	Voltage	(Ohms)	Style	Contact Voltage	Contact Current	Pins	Terminal Type	LxWxH(in.)	1	10	50	100
1	11448	RC108T	Han Kuk	12VDC	550	SPDT-NO	250VAC/150VDC	0.1A	4	PCB solder	1.0 x .37 x .38	\$1.75	\$1.49	\$1.25	\$1.09
1	68356	R8864-2	ELEC-TROL	12VDC	1080	SPDT	28VDC (max.)	0.25A	5	PCB solder	1.1 x .35 x .32	2.25	1.95	1.75	1.49

T9A Relay (SPST N.O.)

Potter and Brumfield Type

- · Contact volt: 120/240VAC
- Coil volt: 12VDC Contact curr.: 30A
- Terminal type: PCB solder (4); 0.25" disconnect (2)
- Temperature range: -55°C to +55°C
- · Mechanical life expectancy: 10 million operations
- Insulation resistance: greater than 100M Ω @ 500VDC
- Size: 1.3'L x 1.0'W x 1.1"H UL/CSA listed Part No. Product No. 10

169463 T9AS1D2212 ... \$2.25 \$1.95 \$1.75 \$1.49

SHARP Solid State Relays

DC to AC

164988: • Output: 125VAC @ 1.5A

- Input volt: 1.2Vf @ 20mA (If)
- · On-state volt: 1.5Vrms
- Zero cross volt: 35V (If = 15mA)

164996 164996: • Effective on-state curr.: 2Arms

 Input volt 1.2Vf @ 20mA • Output: 265VAC @ 2.5A • Operating freg.: 45-65Hz • Isolation volt: 3000Vrms

Part No.	Product No.	1	10	50	100
164988	S101S02	\$3.95	\$3.49	\$2.95	\$2.49
164996	S202TA1	3.95	3.49	2.95	2.49

Aromat Ultra Miniature Power Relay Potter & Brumfield T72 Type Relay

- · Enclosed relay • Pins: 5
- Contact form: SPDT
- Coil voltage: 12VDC
- · Contact voltage: 125VAC/24VDC
- Coil resistance: 400Ω
- · Contact current: 10A/5A
- Terminal type: PCB solder
- Size: 0.85"L x 0.62"W x 0.63"H

P&B cross reference: T72M5D121-12 Part No. Product No. 1

100 JS1-12V......**\$1.19** \$.99 \$.85 172937 \$1.09



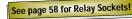




General Purpose Relays

Pin Type Terminals - Series 78

Contact voltage: 10A @ 240VAC



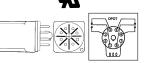
Part	Jameco	P&B	Coil	Coil				Pricing	
Number	Product Number	Cross Reference	(voltage)	(Ohms)	Style	Pins	1	10	50
172718	SCL12DPDT	K10UP21D1512	12VDC	160Ω	DPDT	8	\$4.95	\$4.49	\$3.95



Pin Type Terminals - Series 250

· Contact voltage: 120/240VAC, 28VDC @ 10 amp

- Plug-in mounting with see-through dust covers
- · High dielectric strength · AC or DC operated coils
- Ambient temp. operating: -10°C to +50°C
- Size: 1.4"L x 1.4"W x 2.7"H Weight: 0.1 lbs.





Part Jameco NTE Pricina Coil Coil Number **Product Number** Cross Reference (voltage) (Ohms) Style Pins 10 50 DPDT \$6.95 139766 BTA1-2C-12VDC R02-11D10-12 12VDC 120Ω 8 \$6.25 \$4.95 139740 BTA1-2C-120VAC DPDT R02-11A10-120 120VAC 1.9K Ω 6.95 6.25 4.95

Relay Type Project Cases for above Relays

Part No.	Product No.	No. of Pins	Compatible Sockets	1	10	100
155096	RC8	8	141145/152590	\$2.95	\$2.49	\$2.25
155088	RC11	11	141153	2.95	2.49	2.25



Quick Connect Blade Terminals - Series 388

Flat terminals (0.187" x 0.020") for standard plug-in mounting also accept quick-connect receptacles or direct soldering.

Contact voltage: 120VAC/28VDC @ 13A/240VAC @ 10A

• Ambient temp. operating: -30°C to +50°C

• Weight: 0.2 lbs. • Size: 1.5"L x 1.4"W x 2.2"H

G. SUL B G. SUL B Z FORM C	9 9 9 \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$
DPDT	3PDT







Part Jameco NTF Coil Coil Pricing (voltage) Number Product Number Cross Reference Pins (Ohms) Style 1 10 50 BTA1-2C-24VDC R02-11D10-12 DPDT 8 \$5.95 139862 24VDC 460Ω \$6.95 \$5.59 BTA2-3C-24VDC R10-14D10-24 3PDT 11 6.95 6.25 139854 24VDC 470Q 4.95 139838 BTA2-3C-120VAC R10-14A10-120 120VAC $2.13K\Omega$ 3PDT 6.95 4.95

Rayex General Purpose Relays

Potter and Brumfield Type LB2 Series

- Insulation resistance: 1,500MΩmin. @ 500VDC
- · Mechanical life: 10,000,000 operations
- Contact voltage/current: 240VAC/30VDC @ 12A
- Contact resistance: $100m\Omega$ max. UL approved
- · Electrical life: 100,000 operations min. at rated load

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175564 175572

Part	Product	P & B Cross	Coil	Coil			Wt.	Pricing			
Number	Number	Reference	Voltage	Resistance	Style	Pins	lbs.	1	10	50	100
172718	SCL12DPDT	K10UP21D1512	12VDC	160	DPDT	8	0.1	\$4.95	\$4.49	\$3.95	\$3.49
175564	LB2-24DS	K10UP11D1524	24VDC	650	DPDT	8	0.1	4.75	4.25	3.75	3.25
175572	LB2-110AS	K10UP11A15120	110VAC	3900	DPDT	8	0.1	4.95	4.49	3.95	3.49

Pavov I R2 Socket

• Din rail chan cocket for I R2 relays

ixay	y CA L	DZ JUCKCI	Diff fall shap socket for LDZ relays							
Part		Product			Weight	Pricing				
Nun	nber	Number	P & B Cross Reference	Pins	lbs.	1	10	50		
175	5530	PTF08AA	27E895	8	0.1	\$3.95	\$3.49	\$2.95		



Rayex LB2H Series

- Insulation resistance: 1,500M Ω min. @ 500VDC
- Mechanical life: 10,000,000 operations
- · Contact voltage/current: 240VAC/24VDC @ 10A
- Contact resistance: $100m\Omega$ max. UL approved
- Electrical life: 100,000 operations min. at rated load







Part		P & B Cross	Coil	Coil			Wt.				
Number	Number	Reference	Voltage	Resistance	Style	Pins	lbs.	1	10	50	100
175581	LB2H-24DS	KHAU11D1124	24VDC	650	DPDT	8	0.1	\$4.75	\$4.25	\$3.75	\$3.25
175599	LB2H-110AS	KHAU11A11120	110VAC	3900	DPDT	8	0.1	4.95	4.49	3.95	3.49

Al

Rayex LB2H Socket

· Din rail snap socket for LB2 relays

Ellivair onep dediction 222 rollays									
Part	Product			Weight		Pricing			
Number	Number	P & B Cross Reference	Pins	lbs.	1	10	50		
175548	PYF08AA		8	0.1	\$3.95	\$3.49	\$2.95		



Rayex General Purpose Relays **LB4H Series**

175601

175610

176621

176639

176612

- Insulation resistance: $1.500M\Omega$ min. @ 500VDC
- Mechanical life: 10,000,000 operations
- Contact resistance: $100m\Omega$ max.
- · Electrical life: 100,000 operations min. at rated load
- · Contact voltage/current: 240VAC/24VDC @ 5A
- Style: 4PDT Pins: 14
- · Weight: 0.1 lbs.

175601:

- · P&B cross reference: KHAU17D1224
- · Coil voltage: 24VDC
- Coil resistance: 650



- · Coil voltage: 110VAC
- · Coil resistance: 3900

Part No.	Product No.	1	10	50	100
175601	LB4H-24DS	.\$4.95	\$4.49	\$3.95	\$3.49
175610	LB4H-110AS	5.49	4.95	4.49	3.95

Rayex General Purpose Relays

LB4H Socket

- · Din rail snap socket for LB4H relays
- 14 pins
- · Weight: 0.1 lbs.

P&B cross reference: PYF14AA

Product No. Part No.

175556 PYF14AA\$3.95 \$3.49 \$2.95

Solid State Heatsinks

- For SS type KD/KG/KL relays
- · Color: black
- 0.24" side mounting blocks

176621: Heatsink for 5/10/15A relays

- Size: 4.0"L x 2.8"W x 3.2"H
- · Weight: 0.8 lbs.

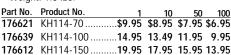
176639: Heatsink for 25A relays

- Size: 4.0"L x 4.0"W x 3.2"H
- · Weight: 1.1 lbs.

176612: Heatsink for 40A relays

- Size: 5 9"L x 4 0"W x 3 2"H

	0.20.	٠.,			• •	••	٠.ـ	•	٠
•	Weig	ht:	1.6 I	bs.					



Solid State Relay Cover

- · For SS relay type KD/KG/KL relays
- · Clear plastic
- Size: 2.4"L x 1.8"W x 1.0"H
- Weight: 0.03 lbs.



DIP Relays

- · Logic control levels
- · Moisture resistant
- · Compatible with IC sockets
- · Long life with reliable operation
- Compact design/ construction
- Excellent for PCB
- applications · Weight: .02 lbs.







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We carry major manufacturers - call for large OEM pricing.



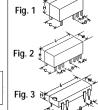
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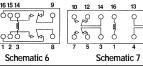
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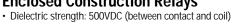
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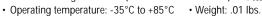
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Schematic 1		Schematic 1 Scl	nematic :	, s	chematic 3	S	Schematic 4	Schematic 5		Schem	atic	6 Scl	nematic 7		~~``\$) (V	
Part	Product	001	Contact	Coil		Contact	1	Contact		Jameco		Package	Leads		Pric	ing	
Number	Number	Manufacturer	Schem.	Voltage	Resistance	Form	Contact Voltage	Current	Pin	Socket	Fig.	LxWxH (in.)	AxBxC (in.)	1	10	50	100
106462	201A05	Excel Cell Elect.	1	5VDC	500Ω	SPST	100VDC	0.5A	8	37161	3	.78 x .25 x .20	.10 x .40 x .30	\$2.25	\$1.95	\$1.75	\$1.49
138430	2D1A05	Excel Cell Elect.	2	5VDC	500Ω	SPST	100VDC	0.5A	8	37161	3	.77 x .30 x .22	.10 x .40 x .30	2.35	2.05	1.85	1.55
106471	201A12	Excel Cell Elect.	1	12VDC	1000Ω	SPST	100VDC	0.5A	8	37161	3	.78 x .25 x .20	.10 x .40 x .30	2.25	1.95	1.75	1.49
138448	2D1A1200	Excel Cell Elect.	2	12VDC	1000Ω	SPST	100VDC	0.5A	8	37161	3	.77 x .30 x .22	.10 x .40 x .30	2.25	1.95	1.75	1.49
138456	202A05	Excel Cell Elect.	3	5VDC	140Ω	DPST	100VDC	0.5A	8	37161	3	.77 x .30 x .28	.10 x .40 x .30	2.49	2.25	1.95	1.75
167281	G6B2114P-US	OMRON	4	12VDC	480Ω	SPST	250VAC/30VDC	5A	6	37372	1	.78 x .43 x .43	.32 x .42 x .33	4.95	4.49	3.95	3.59
129875	DS2EMDC5V★	NEC (MR62-5)	5	5VDC	62.5Ω	DPDT	125VAC/30VDC	.6A/1A	8	37372	1	.79 x .40 x .39	.20 x .40 x .30	3.95	3.49	2.95	2.25
173913	AZ831-2C-5DSE	Zetler	5	5VDC	125Ω	DPDT	125VAC/100VDC	.5A/1.25A	8	37401	1	.79 x .38 x .44	.18 x .28 x .29	2.25	1.95	1.75	1.49
139977	RSB5S	Shin Mei	5	5VDC	125Ω	DPDT	120VAC/30VDC	1A/2A	8	37372	1	.79 x .39 x .37	.20 x .40 x .30	2.49	2.25	1.95	1.75
18593	HB25★	Aromat	6	5VDC	43.4Ω	DPDT	125VAC/30VDC	1A/2A	8	37372	1	.79 x .43 x .63	.10 x .20 x .30	4.95	4.49	3.95	3.25
99338	LM12C00	Clare	5	6VDC	71 Ω	DPDT	125VAC/100VDC	2A	8	37372	1	.79 x .40 x .43	.20 x .40 x .30	2.25	1.95	1.75	1.49
99311	DS2Y-S-DC12V	Aromat (NAIS)	5	12VDC	720Ω	DPDT	110VAC/30VDC	.3A/1A	8	37372	1	.79 x .40 x .43	.20 x .40 x .30	4.95	4.49	3.95	3.49
99901	LX200D00	Clare	5	12VDC	720Ω	DPDT	125VAC/100VDC	2A	8	37372	1	.79 x .40 x .30	.20 x .40 x .30	5.95	5.35	4.79	4.29
18577	HB212★	Aromat	6	12VDC	250Ω	DPDT	125VAC/30VDC	.5A/1A	8	37372	1	.79 x .44 x .60	.10 x .20 x .30	4.95	4.49	3.95	3.49
99320	LM12E00	Clare	5	24VDC	1110Ω	DPDT	125VAC/100VDC	2A	8	37372	1	.79 x .40 x .43	.20 x .40 x .30	2.49	2.25	1.95	1.49
136549	DS4E-M-DC5V	Aromat	7	5VDC	62.5Ω	4PDT	125VAC/30VDC	.6A/2A	14	112299	2	1.40 x .40 x .36	.20 x .30 x .30	4.95	4.49	3.95	3.25
176313	DS4E-M-DC12V	Aromat	7	12VDC	360Ω	4PDT	125VAC/30VDC	.6A/2A	14	112299	2	1.40 x .40 x .36	.20 x .30 x .30	5.95	5.35	4.79	4.29
176305	DS4E-M-DC24V	Aromat	7	24VDC	1440Ω	4PDT	125VAC/30VDC	.6A/2A	14	112299	2	1.40 x .40 x .36	.20 x .30 x .30	6.95	6.25	5.59	4.95

Potter and Brumfield Type Plastic Enclosed Construction Relays



















 Normal 	• Normally open (NO), normally closed (NC) • Terminal type: quick connect • See page 58 for relay sockets 171467 (Fig. 1) 171432 (Fig. 2) 171441 (Fig. 3) 171459 (Fig. 4)											9 (Fig. 4)			
Part	Product	P&B Cross		Coil	Coil		Contact	Contact	Contact				Pricir	ng	
Number	Number	Reference	Figure	Voltage	(Ohms)	Style	Schematic	Voltage	Current	Pins	LxWxH(in.)	1	10	50	100
	VFM Type Relay														
171467	VFM11F11K01	VFM11F11K01	1	12VDC	123	SPST-NO	1	14VDC	20A	4	.78 x .60 x .87	\$1.95	\$1.75	\$1.25	\$.99
	VF4 Type Relays														
171521	LD5F	VF445D11	2	5VDC	14	SPDT	2	12VDC	40A	5	1.1 x 1.1 x 1.0	\$2.25	\$1.95	\$1.75	\$1.49
171441	VF411F11	VF411F11	3	12VDC	90	SPST-NO	3	14VDC	40A	4	1.1 x 1.1 x 1.0	1.95	1.75	1.49	1.25

171432 VF481F11 VF481F11 12VDC SPST-NO 14VDC 40A 1.1 x 1.1 x 1.0 171459 VF481F11S01 VF481F11S01 12VDC 78 SPST-NO 3 14VDC 40A 4 5 1.1 x 1.1 x 1.0 1.95 1.75 1.25 .99 12VDC 78 SPDT 2.49 2.25 1.95 1.75 148582 LD12F VF485F11 12VDC 40A 1.1 x 1.1 x 1.0 LD24F VF485H11 171889 24VDC SPDT 24VDC 40A 1.1 x 1.1 x 1.0

DC/AC and DC/DC Solid State Relays

- Screw terminal with hardware (except P/N 127790)
- Photo isolation Metal mounting base Weight: 0.2 lbs.
- UL_CUL_CSA approved * Pofurbished product + 7 org cro













• UL, CU	* Refurbished product 1 Zero crossing					g	127	127790 (Fig. 1) 153058 (Fig. 2) 138940 (Fig. 3) 162341 (Fig. 4)				l) 176735 (Fig.5) 173518 (Fig.6)			(Fig.6)	
Part	Product		Control		Contact	Contact	Contact			Terminal	Agency			Pric	ing	
Number	Number	Mfg.	Voltage	Туре	Style	Voltage	Current	Pins	Fig.	Type	Approval	L x W x H (ins.)	1	10	50	100
						Sol	id State	Rela	ys DO	C/AC Type						
127790	D2W202F	Crydom	3-28VDC	DC/AC	SPST	240VAC	2A	4	1	Solder Lead	_	1.7 x 0.4 x 1.3	\$7.95	\$7.19	\$6.49	\$6.15
175214	KB20C02A	Kyoto	3-32VDC		SPST	280VAC	2A	4	1	Solder Lead	_	1.4 x 0.3 x 1.5	7.95	6.95	6.25	5.59
153058	KSD203AC2	COSMO	4-32VDC	DC/AC	SPST	240VAC		4	2	Solder Lead	_	1.4 x 0.3 x 0.9	9.95	8.95	7.95	7.25
173518	RLYB4280	Phillips	3-32VDC		SPST	280VAC		4	6	Solder Lead	_	1.7 x 0.4 x 1.5	10.95	9.95	8.95	7.95
176698	KB20C06A	Kyoto	3-32VDC		SPST	280VAC		4	1	Solder Lead	_	1.4 x 0.3 x 0.9	9.95	8.95	7.95	6.95
105081	615-8500	Teledyne	3-32VDC	DC/AC	SPST	250VAC	10A	4	3	Screw Terminal	UL	2.3 x 1.7 x 1.1	14.95	13.49	12.95	11.49
139053*		OPTO 22	3-32VDC		SPST	240VAC	25A	4	3	Screw Terminal	UL/CSA	2.3 x 1.7 x 1.0	17.95	15.95	14.49	12.95
138940*	D2440	Crydom	3-32VDC	DC/AC	SPST	240VAC	40A	4	3	Screw Terminal	UL/CSA	2.3 x 1.7 x 1.0	19.95	17.95	15.95	14.49
162341	ESR51024-010	Excel	3-32VDC	DC/AC	SPST	240VAC	10A	4	4	Screw Terminal	UL	2.3 x 1.7 x 1.1	14.95	13.49	11.95	10.49
162368†	ESR51024-025	Excel	3-32VDC	DC/AC	SPST	240VAC	25A	4	4	Screw Terminal	UL	2.3 x 1.7 x 1.1	19.95	17.95	15.95	14.49
163281*	GA5-4D40	Gordos	3-32VDC	DC/AC	SPST	240VAC	30A	4	4	Screw Terminal	UL/CSA	2.3 x 1.8 x 0.9	14.95	13.49	11.95	9.95
162405	ESR51024-040	Excel	3-32VDC		SPST	240VAC	40A	4	4	Screw Terminal	UL	2.3 x 1.7 x 1.1	22.95	19.95	17.95	15.95
176719	KD20C40AX	Kyoto	3-32VDC	DC/AC	SPST	280VAC	40A	4	5	Screw Terminal	_	2.3 x 1.7 x 0.9	19.95	17.95	15.95	14.49
176727	KD20C50AX	Kyoto	3-32VDC	DC/AC	SPST	280VAC	50A	4	5	Screw Terminal	_	2.3 x 1.7 x 0.9	29.95	26.95	23.95	14.49
176735	KD20C75AX	Kyoto	3-32VDC	DC/AC	SPST	280VAC	75A	4	5	Screw Terminal	_	2.3 x 1.7 x 0.9	34.95	31.49	27.95	24.95
						Sol	lid State	Rela	y DC	/DC Type						
172591	KF0602D	Kyoto	3-32VDC	DC/DC	SPST	60VDC	2A	4	1	Solder Lead	_	1.4 x 0.3 x 0.9	\$9.95	\$8.95	\$7.95	\$6.95
175222	KF0604D	Kyoto	3-32VDc	DC/DC	SPST	60VDC	4A	4	1	Solder Lead	_	1.5 x 0.3 x 0.9	12.95	11.49	9.95	8.95





FPM (Flash Per Minute)

30

181577

181534

181526



Time Delay Relays and Flashers



C10 Series TDR (Time Delay Relay)

- Solid state analog circuitry Pins: 8
- 10A resistive @ 240VAC contacts
- Initial dielectric strength: between contacts and coils 1500Vrms
- Delay time: 0.1 to 60 seconds

120A

- Expected life at 25°C: 10 million operations (mechanical); 100,000 operations min. at rated loads

• Size: 2.4"L x 1.7"W x

• Size: 2	.4 L X I./ VV X 2	2./ H		• weight: 0.3 lbs.			
Part No.	Product No.	Contact Style	Input Voltage	Output Voltage	Time Delay (sec.)	1	10
181569	12DP.1-60C	DPDT	12VDC	250VAC/30VDC@10A	0.1 – 60	\$39.95	\$37.95
181577	120AP 1-60C	DPDT	120VAC	250VAC/30VDC@10A	0.1 - 60	39 95	37.95

Pins

2

• Pins: 8

Delay on operation

· Octal style plug-in model

DF Series Encapsulated Flashers

- · Solid state analog flasher circuitry
- Input voltage: 24-120AC/DC
- · Approximate 50% duty cycle
- Temperature range: -23°C to 60°C (-10°F to 140°F)

2A load rating

• 0.25" quick disconnect terminals

• 10A resistive @ 240VAC contacts

Agency Approval

UL, CSA

UL. CSA

FL (F)

· White case with top adjustable knob

· Weight: 0.1 lbs.

• Size: 1.6"L x 1.1"W x .9"H



181577

1	10	
18.95	\$16.95	
18.95	16.95	

FL (5)

181551

DC10 C	!	TDD	/T:	Dalau	Dalani
DC10 Se	eries	IUK	(Time	Delay	Relay)

· Solid state CMOS digital circuitry

24-120F30DF

24-120F60DF

- · White case with top adjustable knob
- Initial dielectric strength: between contacts and coil 1500Vrms
- · Delay on operation

Part No. | Product No.

- · Octal style plug in model • Expected life @ 25°C: 10 million operations (mechanical); 100,000 operations min. at rated load
- Size: 2.4"L x 1.7"W x 2.7"H

Part No.	Product No.	Input	Output	Style	Delay Time (sec.)	1	10
181551	24DP1-60SDC	24VDC	250VAC/30VDC@10A	DPDT	1 – 60	\$47.95	\$42.95
181542	120AP 1-60SDC	120VAC	250VAC/30VDC@10A	DPDT	01-6	47 95	42 95

DOD Series TDR (Time Delay Relay)

- · Solid state analog circuitry
- · Black case with top adjustable knob
- · Initial dielectric strength: 1500Vrms between contacts and coil
- · Delay on drop-out
- Expected life @ 25°C: 100 million operations (mechanical); 100,000 operations at 4A@250VAC
- Size: 2.4"L x 1.7"W x 2.7"H

- · 4A resistive@ 250VAC contacts
- - · Octal style plug in model

· Weight: 0.3 lbs.

· Weight: 0.3 lbs.



•	1	81	15	18	3
1					

			0			-	0.0.0
Part No.	Product No.	Input	Output	Style	Delay Time (sec.)	1	10
181518	24D.6-60SDOD	24VDC	250VAC/48VDC@4A	DPDT	0.6 – 60	\$59.95	\$53.95
181500	120A.1-10SDOD	120VAC	250VAC/48VDC@4A	DPDT	0.1 – 10	59.95	53.95

C Series TDR (Time Delay Relay)

- · Solid state analog circuitry
- · Black plastic case with side adjustable knob
- Output voltage: 125VAC/60VDC @ 1A
- Initial dielectric strength: 500Vrms between contact and coil
- 181462: Delay on operation; 181471: Delay on break
- Temperature range: -25°C to 60°C (-13°F to 140°F)

•	input voitage	: IZVDC
•	0.111"solder	contacts

- Size: 1.6"L x 1.0"W x 0.9"H
- · Weight: 0.1 lbs.



FL (F)

FL (F

181471

Part No. Product No. Style Delay Time (sec.) Pins Agency Approval 1 12DNO.1-60C 0.1 – 60 UL, CSA 181462 SPST-NO 4 \$29.95 \$27.95 **181471** | 12DC.1-60C SPST-NO 0.1 - 60UL, CSA 27.95 25.95

ST1 Series Delay on Make Timers

- · Solid state circuitry no moving parts
- · 2-terminal series connection to load
- · Voltage drop: typically 2.5Vrms@1A
- Temperature range: -40°C to 65°C (-40°F to 149°F)
- Size: 2.2"L x 2.2"W x 0.8"H

- · Delay on make
- Output: 1A continuous load
- 0.25" quick connect terminals
- · Weight: 0.2 lbs.

181489

Part No.	Product No.	Input	Style	Delay Time (sec.)	Pins	Agency Approval	1	10
181497	12D1-100SST1	12VDC	SPST	1 – 100	4	UL, CSA (pending)	\$23.95	\$21.49
181489	120A1-100SST1	120VAC	SPST	1 – 100	4	UL, CSA (pending)	23.95	21.49

KYOTO DC/DC Solid State Relays

KG Series

- 4 pins · Style: SPST · Type: DC/DC
- · Must turn-off voltage: 1.0VDC max.
- Input impedance: $1.5K\Omega$
- Frequency range: 47-70Hz
- · Control voltage: 3-32VDC
- · Contact voltage: 120VDC



• IVIIIIIIIII	m blocking voil	age: 140vL		• Screw terminal			170	0000
Part	Product	Control	Contact	Size	Pricing			
Number	Number	Voltage	Voltage @ Current	L x W x H (ins.)	1	10	50	100
176647	KG1005D	3-32VDC	120VDC @ 5A	2.3 x 1.7 x 0.9	\$19.95	\$17.95	\$15.95	\$13.95
176655	KG1010D	3-32VDC	120VDC @ 10A	2.3 x 1.7 x 0.9	24.95	22.49	19.95	17.95

JAMECO Relay Socket w/ Coil Diode

VF4 Series

- For use w/ P/N 148582 (pg 57)
- 12 AWG (2 black & 1 blue wire)
- 18 AWG (1 black & 1 red wire)
- Diode coil suppression
- Contact voltage: 12V 7.5" wire
- Contact current: 20A Weight: 0.1 lbs

170624	Socket relay	\$1.95	\$1.75	\$1.25
	Description	1	10	50

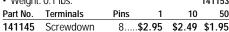
Relay Series 250 Socket

- 250VAC Current: 20 amps 141145: Mounts with #8 screws
- · Accepts #6 ring/lug terminals
- Size: 2.0"L x 1.6"W x 0.8"H
- · Weight: 0.08 lbs.



- · Accepts #6 ring/lug terminals
- Size: 2.0"L x 1.7"W x 1.2"H
- · Weight: 0.1 lbs.

141153



Relay Series 388 Socket

11.....3.95

· 250VAC · Current: 20 amps

Screwdown

- · Mounts with #8 screws
- Size: 3.0"L x 1.4"W 1.0"H
- · Accepts #6/#8 ring/lug terminals
- · Weight: 0.2 lbs.

Part No.	Terminals	Pins	1	10	50
141161	Screwdown	11\$	4.95	\$4.49	\$3.49

P&B Plastic VF4 Relay Sockets

For contacts use:

171424: 12-16 AWG wire

Use P/N 173112

171416: 18-20 AWG wire

Use P/N 173121

173788: PCB Mount

· Pins Included



171424



171416

141145

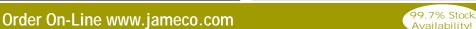
* Prepackaged: please order in increments of 10, 100 or 1000

Part No.	Product No.	Pins	1	10	50	100
171424	VCF41001	5	\$.59	\$.49	\$.39	\$.32
171416	VCF41002	5	59	.49	.39	.32
173788	VCF41000	5	1.09	.89	.79	.69
173112	26A1349A	Pin	*	.17	.12	.10
172121	26413484	Pin	*	17	12	10

Now an easier way to get real time information! Log onto ...



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We carry major manufacturers - call for pricing on quantities over 1000.

Solder Tail Low Profile **Tin Plated IC Sockets**

- · Contact plating: tin
- · Material: beryllium copper or phosphor bronze
- · Contact current: 1A
- · Tin-plated tails
- Contact resistance: less than $5m\Omega$
- · Dielectric withstanding voltage: 300Vrms
- Insulation resistance: greater than $1000M\Omega$
- · Insulator: glass-filled polyester or glass-filled polyphenylene sulfide
- Sleeve material: brass
- · Lead length: .125"
- · Body height: .156'
- · Weight: .01 lbs.



37372

Low Profile - Single Wipe - Tin Plated

· Prepackaged: please order in increments of 10, 100 or 1000

	<i>J</i> 1					
Part No.	Product No.	Pins	Width (in.)	10	100	1000
51570	8LP★	8	0.3\$.06	\$.04	\$.03
37161	14LP★	14	0.3	.06	.04	.03
37372	16LP★	16	0.3	.07	.05	.035
111456	16LP33 [†]	16	0.3	.05	.03	.015
38113	18LP★	18	0.3	.07	.05	.035
38607	20LP★	20	0.3	.10	.06	.04
39132	22LP	22	0.4	.10	.06	.03
39335	24LP★	24	0.6	.12	.07	.03
39378	24SLP	24	0.3	.15	.10	.05
40301	28LP★	28	0.6	.15	.10	.06
41110	40LP★	40	0.6	.17	.12	.08

† with 0.33 µfd decoupling capacitor

Low Profile - Dual Wipe - Tin Plated

· Prepackaged: please order in increments of 10

Part No.	Product No.	Pins	Width (in.)	10	100	1000
112192	6LPD	6	0.3	.\$.07	\$.05	\$.035
112205	8LPD★	8	0.3	07	.05	.035
112213	14LPD★	14	0.3	07	.05	.035
112221	16LPD★	16	0.3	12	.07	.05
112230	18LPD	18	0.3	12	.07	.05
112248	20LPD	20	0.3	12	.07	.04
112264	24LPD	24	0.6	15	.10	.04
112281	24SLPD	24	0.3	17	.12	.05
112272	28LPD	28	0.6	17	.12	.07
112299	28SLPD	28	0.3	22	.17	.08
112301	32LPD	32	0.6	17	.12	.08
112310	40LPD	40	0.6	22	.17	.12
167396	48LPD	48	0.6	19	.12	.08

Solder Tail Standard Gold Plated IC Sockets

- · Contact plating: gold (dual wipe)
- · Material: phosphor bronze
- · Voltage rating: 250Vrms
- · Contact current: 1A

37428

- Temperature range: -65°C to +125°C
- Contact resistance: $10m\Omega$ $30m\Omega$ max.
- · Dielectric withstanding voltage: 500Vrms
- Insulation resistance: >5000M Ω
- · Insulator: glass-filled polyester, black, UL 94V-0
- · Secure contact Lead length: .125"
- · Body height: . 281" · Weight: .01 lbs.

Part No. Produ	ıct No. Pins	Width (in.)	1	10	100
37209 14S	G 14	0.3	\$.79	\$.65	\$.45
37428 16S	G 16	0.3	99	.79	.59
38640 20S	G 20	0.3	99	.79	.59

Standard Wire Wrap (2 level) **Gold and Tin Plated IC Sockets**

- Contact plating: gold (WW) or tin (TWW) ďuál wipe
- Material: beryllium copper or phosphor bronze



- Contact resistance: less than $5m\Omega$ 37233
- Dielectric withstanding voltage: 300Vrms Insulation resistance: greater than $1000M\Omega$
- Insulator: glass-filled polyester or glass-filled polyphenylene sulfide
- Lead length: .438"
- · Weight: .01 lbs.
- · Body height: .281" Sleeve material: brass TWW = tin plated • WW = gold plated

- 1 0 0 0 0	- till plate	u	- 0000	– goiu	piateu	
Part No.	Product No.	Pins	Width (in.)	1	10	100
112660	8TWW	8	0.3	.\$.65	\$.55	\$.39
51641	8WW★	8	0.3	99	.79	.65
37217	14TWW★	14	0.3	75	.65	.55
37233	14WW ★	14	0.3	.1.09	.89	.75
37436	16TWW★	16	0.3	89	.75	.65
37479	16WW ★	16	0.3	1.25	.99	.79
87636	18TWW	18	0.3	99	.79	.59
75379	20TWW	20	0.3	1.09	.89	.75
38674	20WW ★	20	0.3	.1.49	1.25	.89
75416	24TWW	24	0.6	.1.15	.95	.69
39394	24WW	24	0.6	.1.85	1.59	1.25
75424	28TWW	28	0.6	.1.49	1.25	1.09
40352	28WW	28	0.6	2.25	1.95	1.75
41179	40TWW	40	0.6	.1.75	1.49	1.25

Machine Tooled Wire Wrap (2 level) Gold Plated IC Sockets

0.6.....**2.75**

TMSWW = Tin

37410

- Contact plating: gold (except P/N 169148) Tin plated leads Material: beryllium copper
- or phosphor bronze
- Contact current: 3A

41187 40WW

- Contact resistance.

 Dielectric withstanding

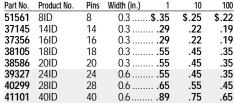
 Weight: .01 lbs.
- Insulation resistance: greater than $1000 \text{M}\Omega$
- Insulator: glass-filled polyester or glass-filled polyphenylene sulfide • Śleeve material: brass
- Lead length: .438" · Body height: .125'

Part No.	Product No.	Pins	Width (in.)	1	10	100
94473	8MSWW	8	0.3	\$.69	\$.55	\$.45
62050	14MSWW	14	0.3	99	.79	.65
37410	16MSWW	16	0.3	1.09	.89	.75
94481	18MSWW	18	0.3	1.25	.99	.79
169148	20TMSWW	20	0.3	1.09	.89	.65
38631	20MSWW	20	0.3	1.35	1.09	.89
185324	22MSWW	22	0.3	1.35	1.09	.89
94490	24MSWW	24	0.6	1.49	1.15	.99
105371	24SMSWW	24	0.3	1.65	1.35	.99
40336	28MSWW	28	0.6	1.75	1.49	1.15
94502	40MSWW	40	0.6	2.25	1.95	1.49

Wire Wrap Socket I.D. Markers

- Quick identification of pin numbers
- Slips onto socket before
 - wrapping (plastic) Can easily write





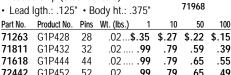
Machine Tooled Low Profile **Gold Plated IC Sockets**

- · Contact plating: gold
- Material: beryllium copper or phosphor bronze
- Tin plated leads
- Contact current: 3A
- Contact resistance: less than $5m\Omega$
- Multiple contact elements
- Dielectric withstanding voltage: 300Vrms
- Insulation resistance: greater than $1000M\Omega$ Insulator: glass-filled polyester or glass-filled
- polyphenylene sulfide Sleeve material: brass
- Lead length: .188" Body height: .125"
- · Weight: .01 lbs.

	_							
Pa	rt No.	Product No.	Pins	Width (in.)	1	10	100	500
10	67003	6MLPT	6	0.3	\$.29	\$.22	\$.17	\$.14
5	1625	8MLP★	8	0.3	.29	.22	.17	.14
3	7196	14MLP★	14	0.3	.39	.32	.25	.22
3	7401	16MLP★	16	0.3	.45	.35	.29	.25
6	5584	18MLP★	18	0.3	.49	.39	.32	.25
38	3623	20MLP★	20	0.3	.55	.45	.39	.35
3	9351	24MLP★	24	0.6	.59	.49	.39	.35
39	9386	24SMLP	24	0.3	.59	.49	.45	.35
40	0328	28MLP★	28	0.6	.75	.65	.55	.45
1	14411	28SMLP	28	0.3	.75	.65	.55	.45
10	05380	32MLP	32	0.6	.89	.75	.55	.49
4	1136	40MLP★	40	0.6	.89	.75	.65	.39
42	2059	48MLP	48	0.6	.89	.75	.55	.39
_								

PLCC Sockets

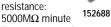
- · Solder tail allows through-hole board patterns in .100" grid
- · Accepts JEDEC type "A" plastic leaded chip (0.05" centers)



71263 G1P428 \$.15 71811 G1P432 .39 .55 71618 **72442** G1P452 52 .02 **.99** .79 .49 .65 G1P468 71968 68 .02 ...1.15 .95 .75 .55 **71976** G1P484 84 .02 ...1.15 .95 .75 .49

PLCC Surface Mount Sockets

- · Current: 1A
- Dielectric strength: 600VAC for 1 minute
- Insulator
- resistance:



- Temperature surface mount: -55°C/ +170°C (PPS)
- Weight: P/N 152688 0.004 lbs.

P/N 152696 - 0.006 lbs.

Part No.	Product No.	No. Pins	1	10	50	100
152688	PLCC44D	44	\$.79	\$.65	\$.49	\$.39
152696	PLCC68D	68	79	.65	.49	.32

88-Pin Solder Tail PGA Socket

- 13 x 13 pin grid array
- · Contact plating: gold
- · Rated current: 1A
- Rated voltage: 100Vrms
- · Contact resistance: $100m\Omega$ max.
- Insulation resistance: 10,000M Ω max. Color: blue
- Size: 1.4"L x 1.4"W x 0.11"T Weight: 0.1 lbs. Part No. Description 10 172355 88-pin socket\$.99 \$.79 \$.65 \$.39



Dimensions in mm

A&B C&D E 23.18 12.70 28.50

30.80 20.32 40.00





Sockets, Header Plugs, Connectors and Accessories

MIL-MAX IC Socket, SIPP, Headers, & DILS Solder Tail, Machine Tooled



· 184680: IC socket; slim line;low profile; machine tooled; solder tail

184701 / 184698: IC Socket; slim line; low profile; machine tooled, solder tail; wrap post 184639

· 184621 / 184647 / 184655: SIPP socket; machine tooled pins; solder tail

• 184639 / 184663: Headers; single row; solder tail; .025" square posts

• 184612: Socket, single in-line dual row; machine tooled pins; solder tail 184612

IC SOCKET

IC COCKET (Many most time)										
184680	28SMLP4	28	0.4"\$.75	\$.65	\$.55	\$.45				
Part No.	Product No	. PINS	wiath i	10	100	500				

IC SOCKET (Wrap post type)

Part No.	Product No	. Pins	Width 1	10	100	500
184701	22SMLP	22	0.3" \$.55	\$.45	\$.39	\$.35
184698	24SMLP4	24	0.4" .59	.49	.45	.35

0.1" SIPP (Single Row)

Part No.	Product No.	Pins	1	10	100	1000
184621	17SIPP	17	\$.45	\$.35	\$.29	\$.25
184647	18SIPP	18	49	.39	.25	.15
184655	34SIPP	34	89	.69	.59	.49

0.1" Male Header (Single Row)

Part No.	Product No.	Pins	1	10	100	1000
184639	SRPH20	20\$.99	\$.89	\$.79	\$.69
184663	SRPH34	34 1	.69	1.49	1.29	1.09

0.1" Male Header (Dual Row)

Part No.	Product No.	Pins	1	10	100	1000
184612	20DILS	20	\$.49	\$.39	\$.32	\$.19

PARIES Low Profile ZIF Sockets

Provides a low cost solution for ZIF test socket requirements. It has a height of only .319" (8.10mm), and even with the handle in open position measures just .554" (14.07mm).

· Strong rigid cam provides uniform action over entire contact area

· Cast metal cam

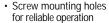
· Tin plated, spring tempered 102752 beryllium copper contacts · Weight: .02 lbs.

· Test point openings provide access to all pins

Part No. Prod	uct No.	Pins	1	10	100
102744 28-	526	28	\$5.49	\$4.95	\$4.25
102752 40-	526	40	6.49	5.95	5.25

PARIES Universal ZIF Sockets

- · UL94V-0 rated body
- 1000M Ω insulation resistance
- · 25,000 to 50,000 contact cycles
- · Accepts .300" to .600" IC centers x .1" spacing
- · Solder directly to PCB or plug directly into IC socket





102744

e operation		• vveig	jnt: U. I II	DS.
duct No.	Pins	1	10	•
-6554-10	24	\$7.25	\$6.49	\$5.9
655/1 10	28	2 /0	7 75	6

Part No. Prod 100 103991 24 95 **104002** 28-6554 6.95 32.....**9.49** 7.75 **104011** 32-6554-10 8.49 **104029** 40-6554-10 40.....**11.25** 10.25 9.25

SIMM and SIPP Sockets

- · Locking tabs · Tinned contacts
- Memory module sockets

Part No.

72531

72426

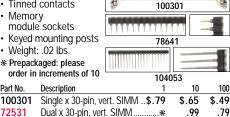
78641

104053

184621

- Keyed mounting posts
- · Weight: .02 lbs.
- * Prepackaged: please order in increments of 10

Description



.45

.55

.65

1.75

.35

.39

.49

.55

1.49

	Card-Edge Con	necto	rc
175919	Single x 36-pin SIPP	85	.65
101000	on gio x oo pii on i (iiii o iii o	p)	, 0

Single x 72-pin vert. SIMM65

Single x 30-pin SIPP (wire wrap) 1.95

101282★Single x 20-pin SIPP.................................69

- · Fit all PC boards
- .054" to .070" thick
- Weight:

.05 lbs.	406
der Fyelet	140" Spacing

Solder E	yelet	.140"	Spacing	Between	Rows
		٠.	ntoot Mo.		

	Solder	Tail	200" Sna	cina D	otwoon [Dovic	
39116	22/44	Gold	.156	5 Yes	\$1.95	\$1.75	\$1.35
Part No.	Position	Conta	cts Cente	rs Ears	1	10	100
			Conta	Ct IVIOUII	ι.		

40694	31/62	Tin (PC/A	T) .100	No	\$.99	\$.75	\$.49
164013	32/64	Tin	.100	No	49	.35	.25
42091	49/98	Tin (AT)	.100	No	89	.59	.39

14-Pin Crystal Oscillator Socket

- Low profile solder tail
- For full-can oscillators (pg 24)
- Good for prototyping and PCB mounting
- 14-pin style, but with only the 4 corner pins (machine tooled);

they can be PCB mounted without the modifications that would be needed with DIP-IC sockets

triat Would be riceded With bir			Joonton	,	
Part No.	Description	1	10	100	1000
133006	Oscillator socket\$.59	\$.45	\$.39	\$.35

.100" DIP Header Plugs

- · Gold-plated leads (*134922 is tin plated)
- Header plugs: keyed corner to indicate pin 1
- U-shaped pin termination for easy component attachment
- Lead length: .188"

38578 20HP

 \[
 \text{\text{1" snacing hetween leads}}
 \]

· U. I 3	pacifig bei	ween lead	13			_
Part No.	Product No.	Width (in.)	Pins	1	10	
104336	8HP	0.3	8	\$.69	\$.59	
134922	14THP*	0.3	14	59	.49	
37129	14HP	0.3	14	79	.65	
37330	16HP	0.3	16	89	.79	

0.3

.100" IDC DIP Flat Cable Plugs

20**99**

- Mates with standard 14, 16, 18, 20, 24, 28 & 40-pin DIP sockets with 0.1" spacing
- Gold-plated contacts

99670 609-28 0.6"

42711 609-40 0.6"

Uses 28 AWG flat ribbon Plastic cable (pg 68)

 Currer 	nt rating: 1	1 amp	 Weigh 	ıt: .0	1 lbs.	.2070	
Part No.	Product No.	Width	Contacts	1	10	100	500
42657	609-14	0.3"	14\$.	.39	\$.29	\$.21	\$.19
42673	609-16	0.3"	16	.45	.35	.27	.25
104096	609-20	0.3"	20	.49	.39	.35	.25
42690	609-24	0.6"	24	.69	.55	.35	.32
175927	IDCPCB26	0.2"	26	.49	.39	.32	.25

28 **.69**

40 **.79**



.59

37129

\$.49 .35

.55

.69



153728 RMH08

103270 RMH36

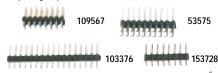
182991 RMH08LP

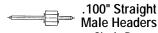


Part No.	Product No.	Contacts	1	10	100	1000
53575	923872R	20\$.4	45	\$.35	\$.29	\$.17
53583	923873R	26	49	.39	.25	.15
53604	923875R	40	55	.45	.32	.22
53612	923876R	50!	55	.45	.32	.25
167257	923672RT	(Tin) 72:	39	.32	.25	.19
103413	923672R	72	75	.59	.49	.35
139563	923680R	808	85	.69	.59	.39

.100" Male Headers (Gold)

- Snap apart to fit your application
- Solder to PC boards for instant plug-in access via shorting blocks (right) Current rating: 1 amp
- Contact material: phosphor bronze Contact area: gold
- Temperature range: -55°C to +120°C
- · Insulation material: glass filled polyester
- .025" square posts on a .100" x .100" matrix
- Use with crimp connector housing (right)
- Weight: .01 lbs.
- * Prepackaged: please order in increments of 10, 100 or 1000





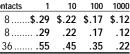


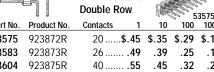
		Siligle Rov	v	10957	5 U	
Part No.	Product No.	Contacts	1	10	100	1000
108337	SMH02	2	*	\$.10	\$.06	\$.04
109575	SMH03	3	. *	.10	.06	.04
117559	SMH04	4	*	.10	.06	.04
153699	SMH06	6	*	.10	.06	.04
153701	SMH08	8	*	.12	.08	.05
103392	SMH10	10	*	.12	.08	.05
103376	SMH17	17	*	.17	.10	.07
103368	SMH20	20	. *	.17	.12	.07
103350	SMH25	25	*	.19	.15	.07
103341	SMH30	30	.29	.22	.17	.10
68339	SMH36	36	.35	.29	.22	.17
160881	SMH40	40	.39	.32	.25	.17

100" Ctrolabi

	<u> </u>	100" Straigh	t	111	
	J	Male Headers	S	44	
		Double Row	678	20 🖷	Mestle n
Part No.	Product No.	Contacts 1	10	100	1000
115027	923804R	4 *	\$.10	\$.06	\$.04
115035	923806R	6 *	.15	.10	.05
109516	923808R	8 *	.15	.10	.04
67820	923810R	10*	.17	.12	.08
118455	923714R	14 .29	.22	.17	.10
109567	923816R	16 .29	.22	.17	.10
53479	923862R	20 .32	.25	.19	.12
53495	923863R	26 .35	.29	.22	.12
53516	923864R	34 .35	.29	.22	.17
53532	923865R	40 .39	.32	.25	.17
53559	923866R	50 .39	.32	.25	.15
68574	923860R	60 .39	.32	.22	.15
103405	923772R	72 .49	.39	.32	.19
117196	923780	80 .65	.55	.45	.25







We carry major manufacturers - call for large OEM pricing.

.100" and 2mm Shorting Blocks

Mate with Male Headers





jumper to address or 22023 (open) 112432 (closed) code strip line plugs (male header, pg 60)

- · Mates to .025" square posts on .100" centers
- · 22023 is open on top to allow for a test point while 19140 is closed – functionally they are the same
- 119263: 2mm shorting block (for disk drives)

* Prepackaged: please order in increments of 10, 100 or 1000							
Part No. Description	10	100	1000				
22023 Top open, black★*	\$.10	\$.06	\$.04				
119263 Top open, black (2mm) *	.15	.10	.05				
112424 Top open, blue *	.10	.06	.03				
112416 Top open, red *	.10	.06	.04				
19140 Top closed, black★ *	.10	.06	.04				
112441 Top closed, blue *	.10	.06	.03				
112432 Top closed, red *	.12	.08	.04				

.100" Non-Polarized Connector Housings and Crimp Pins

- Mates with .025" square post on pattern of .100" centers (male headers, see left)
- · Current rating: 1A · Pin material: tin plated brass
- Pin wire gauge: 26-22 AWG Plastic Wt.: .004 lbs.
- Temperature rating: -55°C to +105°C
- · Use 159265 pin crimper (pg 130) for 100765 pins
- * Prepackaged: please order in increments of 10, 100 or 1000





Part No.	Product No.	Contacts 1	10	100	1000
100811	SCH2	2*	\$.15	\$.10	\$.06
157382	SCH3	3 *	.15	.10	.06
100802	SCH4	4*	.19	.12	.06
163686	SCH5	5 *	.19	.12	.08
103211	SCH6	6 *	.19	.12	.06
103202	SCH8	8 *	.19	.12	.06
103190	SCH10	10 *	.19	.12	.09
103181	SCH20	20*	.25	.15	.12
157411	SCH30	30*	.25	.15	.12
103157	SCH36	36 .4 5	.35	.29	.19
100765	FCH1	Female pin*	.10	.06	.04
145357	MCH1	Male pin*	.12	.08	.05

	Double Row
(Side View)	
7/_/~~~	
(Top View)	
145357	



	145357			10	3253
Part No.	Product No.	Contacts 1	10	100	1000
103253	DCH8	8 \$.29	\$.22	\$.15	\$.07
157420	DCH10	10 .32	.25	.19	.10
157438	DCH14	14 .35	.29	.22	.15
103237	DCH16	16 .35	.29	.19	.10
103229	DCH20	20 .35	.29	.17	.12
157454	DCH34	34*	.12	.10	.08
157462	DCH40	40*	.19	.12	.09
157471	DCH50	50 .39	.32	.25	.22
100765	FCH1	Female pin*	.10	.06	.04
145357	MCH1	Male pin*	.12	.08	.05

.100" Shorting Block w/ Handle

Mates with .100" Male Headers

Ratings: • Current: 3A

- · Accessible test point in handle
- Contact resistance: $20m\Omega$ max.
- Insulator resistance: $100M\Omega$ max.
- Dielectric strength: AC 650V RMS for 1 min.

Material:

Plastic: PBT, glass filled

 Contact: phosphor bronze
 Color: black * Prepackaged: please order in increments of 10, 100 or 1000

Part No. Description 100 1000 152670 Shorting block w/handle......* \$.15 \$.12 \$.07

.100" and 2mm IDC Socket Connectors **Double Row**

· Mates with 2 rows of .025"Sq. or Dia. posts on patterns of .100" centers (male headers, see left & pg 61)



68179

• (100386): 2mm pin spacing • Current rating: 1A

Industry standard IDC socket (plastic)

 Temperature rating: -55°C to +105°C
 Weight: .02 lbs. • Use P/N 73251 (pg 64), insulation displacement

connection crimper for these connectors **Polarized IDC Socket Connectors**

Part No.	Product No.	Contacts	1	10	100	1000
32491		10				
153947	S14	14	32	.25	.19	.12
119466	S16	16	32	.25	.19	.15
32521	S20★	20	39	.32	.25	.17
32563	S26★	26	45	.35	.29	.17
32643	S34★	34	45	.35	.29	.17
32678	S40★	40	55	.45	.35	.19
100386	IDC440	44(2mm)	1.35	1.15	.99	.75
32707	S50★	50	65	.55	.45	.29
32758	S60	60	75	.59	.39	.35
		LIBA				

Non-Polarized IDC Socket Connectors

Part No.	Product No.	Contacts	1	10	100	1000
138376	SN10	10	\$.29	\$.22	\$.17	\$.12
138325	SN20	20	35	.29	.17	.12
138333	SN26	26	39	.29	.19	.13
138341	SN34	34	39	.29	.22	.15
138350	SN40	40	45	.35	.29	.19
138368	SN50	50	55	.45	.29	.22

.100" Low-Profile Male Shrouded Headers

Straight and Right Angle Features: UL recognized, CSA

certified; .025" square post mates with sockets on .100" x .100" grid

· Contact: phosphor bronze, gold-plated Housing material: glass filled polyester, gray, UL94V-0 Use with IDC socket connectors (above)

Part No.	Description	1	10	100	1000
67811	10-pin	\$.29	\$.22	\$.17	\$.12
68179	16-pin	32	.25	.19	.12
68291	20-pin	35	.29	.22	.17
68371	26-pin	45	.35	.29	.17
68582	34-pin	45	.35	.25	.17
68620	34-pin (rt. angle)	35	.29	.22	.15
181104	40-pin	45	.35	.29	.19

.100" IDC Plug Connectors

29217

Double Row

· Current rating: 1A • .100" x .100" grid

· Shrouded header

w/o mounting ears · Contact: gold-plated phosphor bronze · Plastic Use with IDC socket for connectors (above)

	Product No.	Contacts	1		10
29188	P40	40	\$1.75	\$1.49	\$.9
29217	P50	50	1.95	1.75	1.2

.100" (2.5mm) Straight Male Headers

w/ Standard Latch

Double Row



		_			
167409	60-pin		.49	.39	.29
72215	50-pin		.59	.45	.32
71933	26-pin		.45	.35	.22
71829	20-pin	49	.39	.32	.19
117663	10-pin	\$.45	\$.35	\$.29	\$.17
Part No.	Description	1	10	100	500

.100" (2.5mm) Female Haadar Dacantacles

пеаце	Receptacies	
Single row right angle- side entry (A)		
Double row right angleside entry (A)	11111111111111 Edecembloo Echebeshoo	
Single row vertical mount-top entry (B)		₽ '
C-1-1-1-1-1-1-1-1-1-1-	O 1" contact contact	

Gold plated contacts • 0.1" contact center

Right-Angle Mount (Side Entry) - A

71159	20	double	row	99	.79	.59	.49
70746	8	single	row	\$.49	\$.35	\$.25	\$.19
Part No.	Contacts	Туре		1	10	100	500

Vertical Mount (Top Entry) – B Part No. Contacts Type 1 10 100 single row......\$.29 \$.25 \$.12 70720 double row...... .65 .55 .45 .35 16 49 39 20 .59 105056 double row...... .79 .69 .59 .45

.69

49 .45

double row (Tin) 1.15 .156" (3.9mm) Center Straight Friction Lock Headers

- · Ideal for AC and DC power distribution
- Voltage rating: 250VAC/VDC max.
- Current rating: 7 amps AC/DC

70754

70826

163862

111704

34

- Contact resistance: $20 m\Omega$
- Temperature range: -25°C to +85°C
- · Header material: pin tin plated brass Base: nvlon 66, UL94V-2
 Wt.: .01 lbs.

	, 00, 02,					110
* Prepack	aged: please o	rder in	increment	s of 10,	100 or	1000
Part No.	Product No.	Pins	1	10	100	1000
104791	LMH4	4	*	\$.15	\$.12	\$.07
104803	LMH5	5	*	.22	.15	.10
104811	LMH6	6	29	.22	.17	.12
104838	LMH8	8	32	.25	.19	.13
104846	LMH10	10	35	.25	.19	.14

.156" (3.9mm) Center Housings

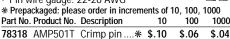
- Common to many power supplies carried by Jameco. Some power supplies (pgs EF!-99) may require multiple connectors
- · Housing material: nylon 66, UL94V-2

	 –
 Use with crimp pins 	104
(P/N 78318 – below)	104

* Prepackaged: please order in increments of 10, 100 or 1000								
Part No.	Product No.	Pins	10	100	1000			
176743	LCH2	2*	\$.10	\$.07	\$.04			
104432	LCH3	3*	.12	.08	.04			
104715	LCH4	4*	.15	.12	.05			
104723	LCH5	5*	.15	.12	.05			
104731	LCH6	6*	.19	.15	.08			
104766	LCH10	10*	.19	.15	.08			

.156" (3.9mm) Center Crimp Pin

- Use with .156 housings (above)
- Use 99442 crimping tool (pg 130) Material: tin plated brass
- Pin wire gauge: 22-26 AWG

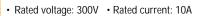






Headers, Housings, Pins and Terminal Blocks

.197" (5mm) Male Header



- Contact pins: 24 Spacing: .197"
- 0.05" round posts Color: black
- · Snap apart to fit your application
- · Insulating material: polyamide
- · Contact pin: tin plated brass

• Use with P/N 164793 & 164806 (below)

Part No. Product No. 164814 TBH24......\$1.65 \$1.35 \$1.09

.197" (5mm) Terminal Blocks Plugs

· Materials: cage clamp/ terminal/ pin header tin plated brass; wire protector - phosphor bronze; insulator body - polyamide



· Screw size: M2.6

· Rated current: 10A; 300VAC

· Insulation resistance: $>500M\Omega$ @ 500VDC· PCB hole diameter: 1.8mm



· Wire range: 14-24 AWG

 Use with P/N 164814 (above) Part No. Terminal Block Lgth 10 100 1000 \$.25 164793 .395"**\$.65** \$.35 \$.55 .615" **.89** 164806 .75 .55 .35

.197" (5mm) Terminal Blocks

- Materials: housing: polyimide; solder: tin plated brass; wire protector: phosphor bronze / nickel plated; screw: steel tin plated
- Lead spacing: 0.197" Wire range: 12-24 AWG
- Contact rating: 300V @ 10A PC mount
- Insulation resistance: $500M\Omega$ or more @ 500V
- · Insulation withstanding voltage: 2000VAC min.
- · Modular housing: end to end stackability
- · Terminals interlocking with same series

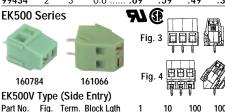
DT Series



\$.29

.35

99397 99434 Fig. 1 Fig. 2 DT128 Type (Side Entry) Part No. Fig. Term. Block Lgth 10 100 1000 99426 0.4".....**\$.59** \$.49 \$.39 \$.32 99397 0.6"..... .69 .59 .49 .39 DT103 Type (45° Entry) 0.4".....\$.59 \$.29 99389 \$.49 \$.39 99434 0.6"..... .69 .59 .49 **EK500 Series**



Part No. Fig. Term. Block Lgth 10 0.4".....**\$.59** \$.49 160784 \$.39 .59 .45

160792 EK500A Type (45° Entry)

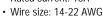
161066 0.4 \$.45 \$.35 \$.29 \$.25 161058 0.6**.55** .35

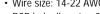
©57 .200" (5.08mm) Vertical **Terminal Blocks**

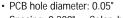
Side Entry

· Rated voltage (UL): 250V

· Rated current: 15A







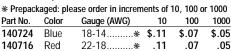
Spacing: 0.200" · Color: blue

· Insulating material: polyamide

Terminal block: copper zinc • Wire guard: copper nickel 1 10 100 1000 Part No. Term. LxWxH (in.) .421 x .351 x .490 ..\$.55 \$.45 \$.35 \$.25 152346 .623 x .351 x .486 ... **.75 .65 .55** 152354

IDC Wire Connectors

- · Connects two to three wire ends or splices one line and one lead
- Insulated snap cover for a secure splice



JAMECO Telecom Splice Connectors

· Provides clean, solid, and rapid





159724

174051 USB-B

161023 USB-A

140716

connection of 169746 169754 169738 wires to keep communication lines free of noise

· Available to handle a wide range of conductor sizes 169754: Y-Type connector 169738: T-Type connector * Prepackaged: please order in increments of 10, 100 or 1000

		wire	IVO. OI			
Part No.	Color	Gauge	Conductors	10	100	1000
169746	Yellow	22-26	2*	\$.15	\$.12	\$.09
169754	Red	19-26	3*	.19	.15	.12
169738	Blue	24-26	3*	.25	.19	.13
	169746 169754	169746 Yellow 169754 Red	Part No. Color Gauge 169746 Yellow 22–26 169754 Red 19–26	169746 Yellow 22–26 2* 169754 Red 19–26 3*	Part No. Color Gauge Conductors 10 169746 Yellow 22–26 2* \$.15 169754 Red 19–26 3* .19	Part No. Color Gauge Conductors 10 100 169746 Yellow 22-26 2* \$.15 \$.12

USB-A & B Connectors and Pin



159716 USB-A

- Insulation resistance: $1000M\Omega$ (min)
- · Voltage current rating: 1A @ 30VAC
- Dielectric with standing voltage: 750VAC

159716/174060: USB Male Connector

- 3 part housing: tin plate over brass and glass fiber
- · 4-pins (P/N 159724) required per USB connector
- · Housing is easily snapped together 161023/174051:

USB Female Connector

· PC mount right angle w/ board locks

159724: Male Crimp Pin

- Pin for P/N 159716 (4 required) · Contact brass
- Use P/N 159265 for crimping tool (pg 130) * Prepackaged: please order in increments of 10, 100 or 1000

Part No.	Description 1		10	100	1000
159716	USB-A connector (M)\$.55	:	\$.45	\$.29	\$.25
161023	USB-A connector (F)59		.49	.39	.29
174060	USB-B connector (M)69)	.59	.49	.35
174051	USB-B connector (F)55	,	.45	.32	.25
159724	Crimp pin for 159716*	:	.10	.06	.04

JAMECO Power Connectors & Pins

Connector & Housing Specifications:

- Housing material: white nylon 6/6 UL94V-2
- Voltage rating: 250VAC (Mate-N-Lock 600VAC)
- Operating temperature: -55°C to +105°C

Crimp Pin Specifications:

- Material: tin plated brass
 Current rating: 1.5 amps
- Wire size range: 24-18 AWG
- Use crimp tool P/N 99442 (pg 130)

Power Connectors and Pins for 3.5" Disk Drives and Power Supplies



114999 * 10 piece minimum

114930

* 10 picce ii	illillilli					
Part No. Pro	duct No.	Description		10	100	1000
114930 17	1822	4-pin F housing	*	\$.19	\$.15	\$.08
114921 17	0262	F crimp pin for				
		114930	*	.10	.06	.04
Part No. Pro	duct No.	Description		1	100	1000
114999 17	1826	4-pin M right an	ıgle	;		

Power Connectors and Pins for 5.25" Disk Drives and Power Supplies

42075 & 42067 Connector Housings:

- Keyed mating connectors
- External key bar indicates pin 1



42075 (Male)

PCB mounting35 .29 .15









Part No. Product No. Description 100 1000 **109145** 109145 4-pin M vertical PCB mounting.....\$.49 \$.39 \$.25 117567 175305 4-pin M PCB mounting, horizontal

* 10 piece minimum

Part No.	Product No.	Description	10	100	1000
42075	480426	4-pin M housing *	.25	.19	.12
42067	480424	4-pin F housing *	.25	.19	.12
42729	61118	M crimp pin for			
		42075*	.10	.06	.04
42649	60619	F crimp pin for			

(H) Extraction Tools for Above Crimp Pins

42067....* .10 .06 .04

- · Quickly and easily extract .093" locking pins from interlocking connectors
- · Heavy duty metal construction
- · Includes directions · Precision design
- · Length: 5" · Weight: 0.1 lbs.

Part No.	Product No.	Description	10
131887	HT319C	Male tool for 42729 \$8.95	\$7.49
131879	HT319B	Female tool for 426498.95	7.49



Kit Includes:

42382

Front

Back

Qty

Asst

100

ea.

100 ea.

Vertical

Contact

3

5

6

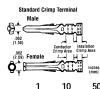
Pins

molex .062" Power Connector Kit This assortment kit contains mating

sets of housings and pins. Kit includes male and female tin plated standard brass .008" pins; 18-24 AWG crimp size wire.

- Housing: nylon, UL94V-2
- Voltage: 250VAC Current: 5A
- Temperature range: -40°C to +105°C





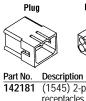
artito.	Description	
142113	(1625-2) 2-pin plugs (3) &	
	receptacles (3), female (8)	

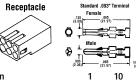
& male (8) terminals.........\$6.49 \$5.75 \$4.95 142156 (W-HT-2285) Extraction tool 12.95 10.95 9.95

.093" Power Connector Kits molex

These assortment kits contain mating sets of housings and pins. All kits include male and female tin plated standard brass .010" pins; 18-22 AWG crimp size wire.

- Housing: nylon, UL94V-2 Voltage: 250VAC
- · Current: 12A (P/N 142181); 9A (P/Ns 142201/142228)
- Temperature range: -40°C to +105°C
- · Weight: .05 lbs.





i ait ivo.	Description
142181	(1545) 2-pin plugs (3) &
	receptacles (3), female (8)
	& male (8) terminals

.\$4.95 \$4.49 \$3.95

(1490) 4-pin plugs (2) & receptacles (2), female (10) 142201

& male (10) terminals......4.95 4.49 3.95 142228 (1261) 6-pin plugs (2) &

receptacles (2), female (14)

& male (14) terminals......4.95 4.49 3.95 142236 (W-HT-2038) Extraction tool 12.95 11.49 10.49

Headers and Connector

CD-ROM Headers and Connector



152725 Voltage rating: 250V AC/DC

Current rating: 3A AC/DC

Insulation resistance: 1000MΩ min.

Connector material: PBT, 30% glass

 Header material: PBT + 30% glass 181753 Withstanding voltage: 1000V AC/minute

 Pin material: tin plate brass · Contacts: 4 Recommended crimp tool P/N 99442 (pg 130)

P/N 152733 requires 4 pins (P/N 181673)

* Prepackaged: please order in increments of 10

Part No.	Description 1	10	100	1000
152741	Straight header (4-pin) \$.35	\$.29	\$.19	\$.12
181753	Straight header (5-pin)45	.35	.29	.15
152725	Right angle header45	.35	.29	.15
152733	Single w/latch	.25	.19	.15
181673	Female pins*	.10	.06	.04

.156" Male Header Kit (100 Pcs.)

With Locking Strip

- · Voltage rating: 250V AC/DC
- · 0.045" post diameter
- · Current rating: 7A AC/DC
- Insulation resistance: $1000M\Omega$ min.
- · Header material: tin-plated

brass (pin); nylon (base)

Part No. Prod. No. Description

6 7 • Temperature range: -25°C to 85°C 8 9 10 172857 LRMHK .156" male header \$7.95 \$6.95

Contacts

IAMECO .156" Female Crimp Pins Use 99442 crimp-

ing tool (pg 130) · Material: tin plated brass · Pin wire gauge: 18-22 AWG

* Prepackaged: please order in increments of 10, 100 or 1000 Part No. Product No. Description 10 100 1000 **154093** LRPIN Crimp pins....* \$.17 \$.12 \$.08

ATX Power Connectors for Motherboards and Power Supplies

- Voltage rating: 250V AC/DC
 Current rating: 7A AC/DC
 Temperature range: -25°C to 85°C
- Insulation resistance: $1000M\Omega$ minimum Withstanding voltage: 1500V/min.

147379: ATX male 20-pin edge mount connector

- Material: nylon 66, UL-94VO
- Material of post: brass tin plated Diameter of post: .045"
- 147387: Housing connector
- · Material: nylon 66, UL-94VO
- 147395: ATX power terminal pins

· Material: brass tin plated



78318

200

78326

78300

material zraee in platea				opao.	agou. p.			3 00, .00	
Part No.	Description	L	W	Н	Dia	Use With	1	100	1000
147379	20-pin male connector	1.7"	0.4"	0.6"	_	_	\$.49	\$.39	\$.25
147387	20-pin housing connector	1.7"	0.4"	0.8"	l —	147395	.45	.35	.19
147395	Power terminal pin, female	.59"	_	_	.068"	147387	* .12	.08	.05

Standard Power Connectors for Motherboards and Power Supplies

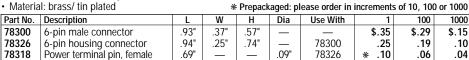
- Voltage rating: 250V AC/DC
 Current rating: 7A AC/DC
 Temperature range: -25°C to 85°C
- Insulation resistance: $1000M\Omega$ minimum Withstanding voltage: 1500V/min.

78300: AMP60G male 6-pin PCB mount connector

- Material of post: brass/ tin plated Diameter of post: .09"
- 78326: AMP50G female 6-pin housing connector

· Material: nylon

78318: AMP501T terminal pin



.100" Low Profile Keyed Shrouded 100 Piece .078" (1.9mm) Assorted Headers, Housings and Pin Kit

TITTE

- Voltage rating: 250V AC/DC
- Current rating: 2A AC/DC
- Temperature range: -20°C to +85°C
- Insulation resistance: 1000M Ω min.
- Material (base): nylon 66
- Material (post): brass, tin plated
- Applicable PC board thickness: 0.031" to 0.063" (0.8 to 1.6mm) Pin wire guage: 22-28 AWG
- Pin material: phos. bronze
- Use 99442 crimper for pins (pg 130) **152493**: Crimp pins

* Prepackaged: please order in increments of 100 or 1000							
Part No. Prod. No.	Description	1	10				
172873 SVHCHK	.078" header housing kit.	\$7.95	\$5.95				

172873 SVHCHK .078" header housing kit\$7.95 \$5.95 Part No. Prod. No. Description 100 1000 152493 FCH2 Female crimp pin					
	172873	SVHCHK	.078" header housing kit	\$7.95	\$5.95
152493 FCH2 Female crimp pin* .05 .04	Part No.	Prod. No.	Description	100	1000
	152493	FCH2	Female crimp pin	.* .05	.04

Centronics Parallel Interface Connectors



Metal Body and Shell, Solder Type Contacts

 Compatible w/ industry standard Solder eyelets accept 24 AWG

wire (pg 68) · Weight: .01 lbs. Male Cable Plugs

Complete with cable boot, shell & hardware

Female Cable Receptacle Can be used as panel mount

180937 Complete with spring latches and cable boot

180937: Right angle strain relief Part No Product No Description

Part NO.	Product No.	Description	- 1	10	50
180072	57-30140	14-contact male \$1.4	49	\$1.25	\$.99
180064	56-30140	14-contact female 1.4	49	1.25	.99
180056	57-30240	24-contact female1.	49	1.25	.99
42382	57-30360	36-contact male1.	49	1.25	.85
42403	57-60360	36-contact female1.	29	1.09	.89
72012	5703-50	50-contact male1.	75	1.49	1.09
180937	57-30500R	50-contact male1.	95	1.75	1.59
71714	5704-50	50-contact female2.	49	2.25	1.75

36-Pin Female Centronics Connector Vertical PC Mounting

· Board mount

· Current rating: 1A Voltage rating: 250AC RMS

Insulation resistance: 1000M Ω min. @ 500VDC

· Contact area plating: gold over nickel

Contact material: copper alloy . Spring latches • Solder type contacts • Weight: 0.03 lbs.

Description 159708 36 contact female\$.99 \$.79 \$.55

PCB Right Angle Centronics Interface Connectors





Solder-type contacts Metal body Space between rows: .164" • PC mount Space between pins: 0.1" Weight: 0.06 lbs

Opucc i	octivecti piris. o. i	Weight. 0.00 hbs.		
Part No.	Description	ັ 1	10	100
72151	36-contact female	\$1.49	\$1.25	\$.99
72080	50-contact female	1.49	1.25	.95







50-pin Half Pitch IDC **SCSI-II Connectors**

Crimp two ribbon cables (P/N 37760, pg 68) and create your own cable.



· Weight: .02 lbs.

139352: HDB50P 50-pin high density D-sub male 139361: HDB50S 50-pin high density D-sub female

Part No.	Description	1	10	50
139352	50-pin male SCSI-II\$1.9	95	\$1.49	\$1.25
139361	50-pin female SCSI-II2.6	55	2.25	1.89

68-pin Half Pitch SCSI-III Connectors

Crimp two ribbon cables (P/N 37840, pg 68) and create your own assembled SCSI-III 68-pin cable. • Weight: .03 lbs. 139061: HDB68P 68-pin high



139070

density D-sub male 139070: HDB68S 68-pin high

density D-sub female Part No. Description 68-pin male SCSI-III\$3.75 \$2.75 \$2.49 139061 139070 68-pin female SCSI-III 4.25 3.75 3.25

IDC Centronics Connector

- · Contact material: gold plated phosphor bronze
- · Current rating: 1 amp Use 73251 IDC crimping
- tool (right) · Temp. rating:

-55°C to +105°C Plastic

Weight: 04 lbs



		•				
Part No.	Product No.	Contacts	Туре	1	10	100
13848	CEN36M	36	male	.\$1.75	\$1.49	\$1.09
13821	CEN36F	36	female	1.49	1.25	.99
180902	CEN50F	50	female	3.95	3.49	2.95

IDC Bench Press and Accessories

Designed for low to medium volume mass termination of various IDC connectors on flat ribbon cable.



· Includes assembly base and standard platen

• Size: 10.0"W x 8.8"D x 9.0"H

Part Number	Product Number	Description	Wt. (lbs.)	1	10
27174	M505	IDC bench press	7.0 \$164	.95 \$1	49.95

M505 Accessories

27182 M507 Flat ribbon cable cutter 0.9..**\$64.95 \$59.95** 27203 M510 Connector base plate 0.5....29.95 26.95

(IDC Crimping Tool

- · Crimp insulation displacement connectors
- · Crimping distance: 27.5mm to 6mm (with attachment)
- · Cushioned red handles
- Size: 9.2"L x 3.0"W · Weight: 1.1 lbs.
- Use for IDC socket connectors (pg 61) Part No. Product No. 73251 HT214 *\$11.95 \$10.95 \$9.95

Standard and Mini DIN Plugs (P) and Receptacles (R/S)



- Solder barrels
- · With strain relief
- · See page 68 for cable · Weight: .02 lbs.

Part No.	Product No.	Pins	Type 1	10	100
142279	4MDP	4	Mini\$.89	\$.79	\$.59
142261	6MDP	6	Mini	.85	.69
177244	6MDR	6	Mini	.85	.69
111878	8MDP	8	Mini 1.09	.89	.75
177236	8MDR	8	Mini 1.09	.89	.75
15878	DINP5	5	Standard55	.45	.39
180873	DINS5	5	Standard55	.45	.39
15886	DINP6	6	Standard59	.49	.43
15894	DINP8	8	Standard69	.59	.49
180865	DINS8	8	Standard79	.69	.59

Standard Female Sockets

- Metal body
 Panel mount
- Solder lugs
- Weight: .01 lbs

vvcigi	1101 103.				- 0	0
Part No.	Product No. S	ocket	Туре	1	10	100
15843	DINJ5	5	Standard\$.6	65	\$.55	\$.39
15851	DINJ6	6	Standard	75	.59	.39
15860	DINJ8	8	Standard8	35	.69	.55

Standard Right Angle DIN **Female Sockets**

- Set back: 0.5"
- · PC mount contacts
- · Weight: .01 lbs.

155061: Plastic/metal body



* Prepackaged: please order in increments of 10, 100 or 1000 Product No. 100

155061

29399

169501

		0001101			
155061	MDJ0013P	3 (mini) shielded	*	\$.10	\$.07
140791	MDR4S	4 (mini)	.54	.45	.29
119474	MDR6S	6 (mini)	.75	.65	.55
29399	RD5	5	.55	.45	.32
		:00°			

JAMECO RCA Jacks

- Standard RCA jacks for audio and video signals
- See page 180 for RCA cables
- · 112475/169501:
- · Right angle · 159484/172339:

		~~		100	
 Panel r 	nount	159	484	1723	339
Part No.	W x D x H (ins.)	1	10	100	1000
112475	.42 x .57 x .48	\$.39	\$.29	\$.25	\$.12
169501	.40 x .85 x .50	29	.22	.15	.12
159484	.84 x .38 Black	49	.39	.32	.19
172220	04 v 20 Dod	20	22	25	10

(H) Terminal Wire Crimping Tool

- Crimps solderless terminals: 22-18 AWG red, 16-14 AWG blue and 12-10 AWG yellow
- Size: 9.0"L x 2.0"W Weight: 0.8 lbs. Part No. 72995 HT303.....**\$15.95 \$14.49 \$12.95**

Insulated Solderless Terminals

- · Insulation thickness: .030' Funnel ramp





- entry 103683 Temperature to 105°C
- Use with Jameco crimping tool 72995 (below)
- · Prepackaged: please order in increments of 10, 100 or 1000

Ring Solderless **Terminals (Insulated)**



Part		Wire Gauge	Stud		Pricing	
Number	Color	AWG	Size	10	100	1000
103683	Red	22-16	#6	\$.09	\$.06	\$.04

Spade Solderless Terminals (Insulated)

	•		•			
Part		Wire Gauge	Stud		Pricing	
Number	Color	AWG	Size	10	100	1000
103587	Red	22-16	#6	\$.10	\$.06	\$.04
103595	Blue	16-14	#8	.10	.06	.035

Disconnect Solderless Terminals (Insulated)



22-16 171 Pc. Solderless Terminal Kit

170 Terminals

Red

Clear, hinged plastic box

109111[†] Female

- and Connectors! Box size: 8.3"L x 4.3"W x 1.3"H
- Use crimping tool
- P/N 72995 (below) Contains 18 different
- types of terminals and connectors · Wt.: 0.6 lbs. (170 total pieces) as follows:

		Wire	Blade			Wire	Blade
Qty.	Description	Gauge	Size	Qty.	Description	Gauge	Size
10	Male discon.	22-16	1/4"	10	Ring term.	16-14	#10
10	Male discon.	16-14	1/4"	5	Ring term.	12-10	#10
10	Fem. discon.	22-16	1/4"	5	Ring term.	12-10	#14
10	Fem. discon.	16-14	1/4"	10	Spade term.	22-16	#6
10	Ring term.	22-16	#6	10	Spade term.	22-16	#8
10	Ring term.	22-16	#8	10	Spade term.	16-14	#10
10	Ring term.	22-16	#10	10	Butt connec.	22-16	_
15	Ring term.	16-14	#6	10	Butt connec.	16-14	_
10	Ring term.	16-14	#8	5	Butt connec.	12-10	-

10989 Termina	al kit \$9.95	\$8.95	\$6.95

Non-Insulated Terminal D-Sub Crimping Tool

14-26 AWG

- · Heavy-duty metal crimping tool w/ cutter
- For computer pins and sockets, D-sub 26-28 AWG wire
- For butt-insulated connectors, 22-26 AWG wire
- For telephone spade lugs, 22-26 AWG wire
- · For non-insulated connectors, 20-22 AWG wire
- For non-insulated connectors, 14-18 AWG wire
- Red insulated handles Coiled spring return Size: 7.3"L x 1.5"W · Weight: 0.5 lbs.
- Part No. Product No. 1 10 99442 HT202A......\$8.49 \$7.49 \$6.95 \$6.29





D-Subminature Connectors, Mounting Hardware and Hoods

We carry major manufacturers - call for pricing on quantities over 1000.

4-40 Mounting Screw Hardware for D-Subminiature Connectors

2 Pc. 4-40 Screw (.30"L) and Retainer Set



* Prepackaged: please order in increments of 10, 100 or 1000						
Part No.	Description	10	100	1000		
102808	.30"L screw/retainer set*	\$.19	\$.15	\$.12		

4 Pc. 4-40 x .187" Jack Screw (.31"L Thread),

vva	isner, Lo	ck wasner	and IN	iut Sei	
6	00	102	4-40 Jack screw only	.187"	15" -
Part No.	Description		10	100	1000
16547	315"L scre	w/nut set	* \$.25	\$.19	\$.13

4-40 x .187" Jack Screws and Hex Nut

` ├ ─	- L	.1	87"			
		10898	36		10279	5
Part No.	Description			10	100	1000
169931	.275"L jack	screw	*	\$.16	\$.12	\$.09
172603	.315"L jack	screw	*	.13	.09	.05
102816	.435"L jack	screw	*	.17	.13	.10
108986	.515"L jack	screw	*	.19	.14	.11
175636	.187"L hex	nut	*	.15	.12	.06
102795	.240"L hex	nut	*	.17	.12	.06

4-40 x 1.9" Plastic Beige Thumbscrew (for D-Sub Connectors)

	(.0. 2 000 00		~,		
	.870"	■ .33" ▶	← .47" -	►	
.295" Y			▼ ▼.157*	Z Z ▼ .0	8"
Part No.	Description	1	10	100	1000
125014	1.9"L thumbscrew.	\$.35	\$.25	\$.19	\$.15

D-Subminiature Connector Hoods



- · Use with D-sub solder cup & housing style connectors
- Hardware included
 Weight: 0.2 lbs. D Series: plastic hood with strain relief (gray) MD Series: metal coated plastic hood with strain relief MH Series: die-cast metal DB25 hood with strain relief

Part No.	Product No.	Connector 1	10	100	1000
15721*	DE9H	9-pin \$.32	\$.25	\$.19	\$.15
25620	MDE9H	9-pin45	.35	.29	.25
147740	DE9MH	9-pin 1.15	.89	.65	.49
15018*	DA15H	15-pin35	.29	.22	.17
25566	MDA15H	15-pin45	.35	.29	.25
15085*	DB25H	25-pin39	.32	.25	.19
25603	MDB25H	25-pin 45	.35	.29	.25
15106	DB25MH	25-pin 1.39	1.19	.99	.79
15456	DC37H	37-pin 55	.45	.32	.25
25611	MDC37H	37-pin .65	.55	.45	.32
15659	DD50H	50-pin .99	.85	.69	.55

25-Pin Dual Plastic Hood

Designed for custom applications requiring two D-sub connectors. Applications include custom



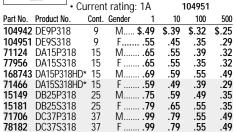
jumper boxes and interconnects. Connectors not included. Hardware included. • Weight: .04 lbs. Part No. 10 100 34091 25-pin, plastic dual ... \$.79 \$.65 \$.55 \$.39

- Metal shells are tin-plated for improved EMI/RFI shielding Insulation resistance: minimum $1000M\Omega$ at 500VDC
- · Insulation material: PBT, UL rated 94V-0
- Operating temperature: -55°C to +105°C
- Contact material: phosphor bronze (gold plating over nickel)
 High temperature thermoplastic

D-Subminiature Right Angle, **PC Mount Connectors**

Shell is available in low-cost plastic, or in metal for shielded applications. Tables below indicate shell type.





*High Density



0.590" Set Back (Long Style) Lead length: .178" Lead spacing: .104' Current rating: 1A



* Prepackaged: please order in increments of 10, 100 or 1000

Part No.	Product No.	Contacts	Gender	Shell 1	100	500
15763	DE9P590P	L 9	M	plastic *	\$.15	\$.10
104969	DE9P590	9	M	metal89	.75	.49
104977	DE9S590	9	F	metal89	.75	.65
104985	DA15P590	15	M	metal45	.35	.29
104993	DA15S590	15	F	metal79	.59	.39
105005	DB25P590	25	M	metal99	.79	.49
105013	DB25S590	25	F	metal 1.19	.99	.65

D-Subminiature IDC Ribbon **Cable Connectors**

Specifications:

- Current rating: 1 amp
- Temp range:
- -55°C to +120°C
- Insulation mat: glass filled polyester 12431
- · Contact material: phosphor bronze
- · Weight: .05 lbs.
- P/N 109217 & 109225 require flat cable w/ .0625" centers
- · Terminates with standard D type connectors

Part No.	Product No.	Contacts	Gender	Shell 1	10	100
109225	MDE9P	9	M	metal\$1.09	\$.89	\$.75
12503	CDE9P★	9	M	plastic 1.35	1.15	.75
109217	MDE9S	9	F	metal 1.09	.89	.75
12520	CDE9S★	9	F	plastic 1.35	1.15	.75
117381	MDA15P	15	M	metal 1.25	.99	.59
12298	CDA15P	15	M	plastic 1.25	.99	.59
116011	MDA15S	15	F	metal 1.25	.99	.69
12319	CDA15S	15	F	plastic 1.35	1.09	.65
115983	MDB25P	25	M	metal 1.25	.99	.79
12335	CDB25P→	25	M	plastic 1.39	1.19	.89
115975	MDB25S	25	F	metal 1.25	.99	.79
12431	CDB25S	25	F	plastic 1.39	1.19	.89
115991	MDC37P	37	M	metal 1.95	1.75	1.25
12466	CDC37P→	37	M	plastic 2.49	2.25	1.75
116003	MDC37S	37	F	metal 1.95	1.75	1.35
12482	CDC37S	37	F	plastic 2.49	2.25	1.75

D-Subminiature Connectors

- - Dielectric withstanding voltage: 1000V (one minute)
 - · Current rating: 1A to 5A

D-Subminiature Solder Cup Connectors

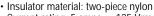


15114 Front 15114 Back

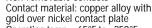
· Compatible with 24 AWG communications and 22 AWG solid cable (pg 67 & 68) · Weight: .04 lbs.

Part No.	Contacts	Gender	Shell 1	10	100	1000
15747*	9	M	metal \$.35	\$.29	\$.22	\$.17
15771*	9	F	metal45	.35	.29	.22
15077	15	M	metal*55	.45	.35	.22
164822	15	F	metal*59	.49	.39	.25
15034*	15	M	metal45	.35	.29	.19
15051*	15	F	metal49	.39	.32	.19
15114*	25	M	metal49	.39	.32	.25
15157*	25	F	metal55	.45	.35	.29
15472*	37	M	metal79	.65	.55	.32
15499*	37	F	metal95	.75	.59	.35
15675	50	M	metal 1.35	1.15	.99	.85
15691	50	F	metal 1.25	.99	.85	.75
			*High Density			

D-Subminiature Straight, **PC Mount Connectors**



 Current rating: 5 amps • 125 Vrms Non-removable contacts



Operating temp.: -65°F to +250°F

* High density

riigiri	acrisity						
Part No.	Product No.	Contact	s Gender	Shell	1	10	10
111691	DE9PPCB	9	M	metal.	.\$.39	\$.32	\$.2
15780	DE9SPCB	9	F	metal.	39	.32	.2
174836	DE15HDPPC	B *15	M	metal.	45	.35	.2
176760	DA15PPCB	15	M	metal.	39	.32	.2
176751	DA15SPCB	15	M	metal.	39	.32	.2
15122	DB25PPCI	3 25	M	metal.	59	.45	.2
15165	DB25SPCI	3 25	F	metal.	59	.45	.2
180013	DC37PPCI	37	M	metal.	69	.55	.4
180021	DC37SPCI	37	F	metal.	69	.55	.4

D-Subminiature Housing Crimp Type Connectors and Pins

Connectors: metal shell; removable crimp male/female pin



38771 180890 19094 Insertion/extraction tool:

red/white plastic body; exchangeable tips • Use 99442 (pg 130) to crimp pins (43377, 43369) • Wt.: .01 lbs.

15122

1	, ,			,				
* Prepackaged: please order in increments of 10, 100 or 1000								
Part No.	Description 1	10	100	1000				
73189	DE9 male housing\$.39	\$.32	\$.25	\$.15				
73197	DE9 female housing39	.32	.25	.15				
73200	DA15 male housing39	.32	.25	.15				
73218	DA15 female housing .45	.35	.29	.17				
180881	HDDE15 male housing .89	.69	.55	.45				
180890	HDDE15 female housing .59	.45	.35	.29				
38789	DB25 male housing45	.35	.29	.17				
38771	DB25 female housing .45	.35	.25	.17				
180048	DC37 male housing69	.55	.45	.35				
180030	DC37 female housing .69	.55	.45	.35				
43377	Male crimp pins*	.06	.05	.04				
43369	Female crimp pins*	.06	.05	.04				
185421	Male crimp pins (for 180881) *	.05	.04	.035				
185412	Female crimp pins (for 180890) *	.05	.04	.035				
19094	Insertion/extraction tool for							

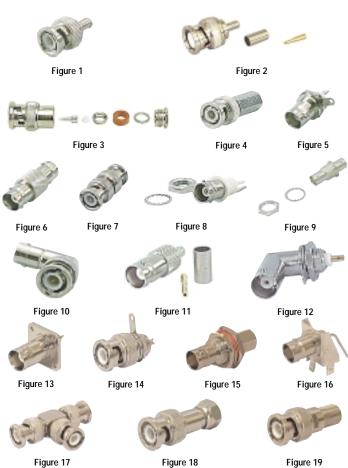
above pins (HT101)...2.95 2.49 1.95 1.49

BNC Coax Connectors

Jameco BNC connectors are miniature, lightweight units designed to operate up to 11 GHz and typically yield low reflection up to 4 GHz. • Weight: .06 lbs.

	31 33		Ü		
Part No. Fig.	Description	1	10	100	500
71458 1	BNC male terminator (50 Ω)	\$1.35	\$1.09	\$.75	\$.59
71790 1	BNC male terminator (75 Ω)	1.35	1.09	.89	.59
102306 1	BNC male terminator (93 Ω)	99	.85	.69	.55
135618 2	BNC male with pin and ferrule (RG6)	69	.55	.29	.25
71482 2	BNC male with pin and ferrule (RG58)	1.19	.99	.79	.55
71271 2	BNC male with pin and ferrule (RG59/62)	. 1.09	.89	.69	.49
112109 2	BNC male with pin and ferrule (RG174)	1.19	.99	.79	.55
119394 3	BNC male clamp-on (RG59/62)	1.35	1.09	.75	.59
108994 4	BNC male twist-on (RG58)	99	.79	.49	.45
71781 4	BNC male twist-on (RG59/62)	1.09	.89	.75	.55
71589 5	BNC female panel mount (UG-1094A)	1.19	.99	.85	.65
71909 6	BNC female/female coupler (UG-914)	89	.69	.59	.45
127343 7	BNC male/male coupler (UG-491B/U)	1.49	1.25	.89	.79
111561 8	BNC female isolated bulkhead	1.95	1.75	1.39	.99
148224 9	BNC female bulkhead feed-thru	1.49	1.25	.99	.79
148232 9	BNC female isolated bulkhead feed-thru	1.75	1.49	1.25	.99
127351 10	BNC M-F right angle (DG-306B/O)	2.25	1.95	1.49	1.25
160928 11	BNC female, crimp type (RG58)	1.09	.89	.69	.55
161921 11	BNC female, crimp type (RG174)	1.25	.99	.79	.65
161269 12	BNC female, right angle; panel mount bulkhead .	1.75	1.49	1.25	1.09
174289 13	BNC female chassis mount	1.25	.99	.79	.65
174300 14	BNC male solder type bulkhead	95	.75	.59	.49
174297 15	BNC female twist-on bulkhead	1.95	1.75	1.49	1.25
174271 16	BNC female right angle chassis mount	1.75	1.49	1.25	1.09
174318 17	Male to male/male T adapter	3.49	2.95	2.49	1.95
174262 18	BNC male to F connector male	1.25	.99	.79	.65
174254 19	BNC male to F connector female	1.49	1.25	1.09	.89

We carry major manufacturers - call for OEM PRICING.



BNC Coax T Adapter Connectors

Application: General purpose coax T adapter; ThinNet/Ethernet LAN adapter · Color: silver · Weight: .08 lbs

· COIOI .	Silver Weight00 ibs.				
Part No.	Description	1	10	100	500
118594	Male to female/female T adapter	\$1.95	\$1.75	\$1.25	\$.89
72629	Female to female/female T adapter	.1.95	1.75	1.25	.99
100589	Male to female/female T adapter (90°)	.3.49	3.25	2.75	2.49
100597	Male to female/female T adapter (180°)	.4.75	4.25	3.49	2.75
117461	Male to female/female F adapter (90°)	.3.49	2.95	2.25	1.95



BNC PCB Mounting Connectors

Part No.	Description	Length (L) 1	10	100	500
146528	BNC straight metal	.719" \$1.95	\$1.75	\$1.35	\$1.15
175935	BNC straight plastic insulation	1.40" 1.75	1.49	1.25	1.09
146510	BNC right angle plastic insulation	1.37" 1.95	1.75	1.49	1.25
161656	BNC right angle metal	.861" 1.95	1.75	1.09	.99

- 146528: Ideal for applications where multiple insertions will require a connector which can endure the stress of high torque
- 175935: Vertical PC mount with posts
- 146510: Maintaining matching impedance at 50 and $75\Omega.$ Ideal for LAN cards and precision video Weight: 0.02 lbs.



BNC & RCA Adapter Connectors

· Convert existing cabling systems to more readily available parts for expansion, replacement or upgrade • Weight: .02 lbs.

Part No.	Description	1	10	100	500
114788	RCA female to BNC male adapter\$	1.25	\$.99	\$.79	\$.49
114753	RCA male to BNC female adapter	1.35	1.15	.89	.59
159441	RCA female to female adapter	1.09	.89	.59	.49
114770	BNC female to "F" connector male adapter	1.49	1.25	.99	.75

See page 67 for our selection of SMA Connectors and Adapters



BNC Coax Network Balun

- · Converts BNC coaxial cable to twisted-pair wires with either a modular (RJ11) jack or 2 screw terminals
- 100Ω termination
- Size: 1.8"L x 0.8"W x 1.0"H
- · Weight: 0.1 lbs.

Part No. Description 72637 BNC coax network balun .. \$5.95 \$5.35 \$4.79



JAMECO SMA / SMB Connectors and Adapters

JAMECO SMA Connectors and Couplers



















188496

• Frequency range: 0-18GHz • Temperature range: -65°C to 165°C • 50Ω impedance

• Plating: gold and nickle • Type: couplers, right angle, bulkhead connectors

153293: Coupler Connector, SMA straight connector jack-to-jack 153285: Bulkhead Connector, SMA bulkhead rear mount solder cup 159530/160021: Panel Mount Connector, SMA female connector, solder cup

160012: Panel Mount Coupler, moisture resistant

Part No.	Description	Cable Type	Plated 1	10	50	100
153293	Straight coupler female – female	_	Gold \$2.25	\$1.95	\$1.49	\$1.25
161277	3-way coupler (1) male – (2) female	_	Gold3.25	2.75	2.25	1.95
161293	Straight coupler male – male	_	Gold2.49	2.25	1.75	1.49
161306	Right angle coupler male – female	_	Gold3.49	2.95	2.25	1.95
153285	Bulkhead solder female w/ lock washer	RG58/174	Gold2.49	2.25	1.95	1.49
159530	SMA female panel mount conn., 4 mounting holes	RG58/174	Gold2.49	2.25	1.75	1.49
160021	SMA female panel mount conn., 2 mounting holes	RG58/174	Gold2.49	2.25	1.65	1.39
160012	Panel mount feed thru connector female – female		Nickle3.25	2.75	2.25	1.95

AMECO SMA Connectors and Adapters

153373

152502

153373/157972: Plug Connectors

· SMA male plug connector for RG58 cable assembly

153365: Plug Connector

· SMA male plug connector for RG174 cable assembly

145381/145373: PCB Connectors

· Blunt-post terminal · Four legs (leads)

· Application: cellular phone da

- Applica	Application, celiular priorie, 133372						
data communication, instrumentation and video							
Part No.	Description						
153373	SMA 50Ω bulkhead crimp type cor	nector					
157972	SMA 50Ω crimp type connector						

157972	SMA 50Ω crimp type connector	RG58
153365	SMA 50Ω crimp type connector	RG174
153453	SMA female to BNC male adapter	_
159468	SMA female to BNC female adapter	_
153592	SMA male to BNC male adapter	_
159476	SMA male to BNC female adapter	_
145381	SMA straight female PCB mount connector	_
145373	SMA 90° female PCB mount connector	_



159476

Cable Type

RG58



159468

Nickle 2.49

Nickle 2.49

Nickle 2.75

Nickle 2.75

Plated

153365



153453



100 10 50 Gold \$1.65 \$1.39 \$1.15 \$.99 Gold2.95 2.49 1.95 1.75 Gold3.49 2.95 2.49 2.25

1.75

1.55

1.75

2.25

1.49

1.39

1.59

1.95

3.49

3.75

Gold5.25 4.75 4.25 Gold5.25 4.25 4.75

SMB Connectors

- · 0-4GHz electrical performance 50Ω impedance
- · Connector: brass with gold plating
- · Insulation: teflon 167302 167311
- · Contact: beryllium copper

Part No.	Description	1	10	50	100
167302	Female PCB	.\$2.25	\$1.95	\$1.75	\$1.49
167311	Fem. right angle PCB	4.95	4.49	3.95	3.49

SMB Jack Connectors

- · SMB bulkhead jacks for RG174 cable
- 50Ω crimp type
- · Gold plated
- · Use with crimping

tool P/N 114534 (pg 130)

Part No. Description 10 172363 Bulkhead crimp female \$3.49 \$2.95 \$2.49 \$2.25 172371 Bulkhead crimp male......3.49 2.95 2.49 1.95

Amphenol® SMA Brass **PCB Receptacles**

Plugs

- Impedance: 50Ω
- · Frequency range: 0-18GHz
- · Terminal type: blunt post
- Gold plated
- Four legs

188496: PCB Receptacle (P)

188517: PCB Angle Receptacle (P) 188517 Part No. Product No. 10

901-9895-RFX\$3.49 \$2.95 \$2.49 901-9894-RFX**6.49** 188517 5.49

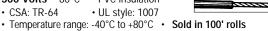
See Back Cover and Page 5 for our new line of Amphenol® Products.

Wire and Cable

We carry major manufacturers - call for large OEM pricing. 18/20/22 AWG Stranded Hook-up Wire **FL (1)**

300 Volts • 80°C • PVC insulation

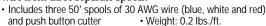




. remper	reinperature range40 C to +60 C - Solu III 100 Tolis						
Part No.	Product No.	AWG	Strands (No. X AWG)	Color	Weight (lbs.)	1	10
126084	223SBK/C	22	7x30	Black	0.4	.\$2.95	\$2.49
126033	223SR/C	22	7x30	Red	0.4	2.95	2.49
126076	223SW/C	22	7x30	White	0.4	2.95	2.49
125840	203SBK/C	20	10x30	Black	0.6	3.49	2.95
125794	203SR/C	20	10x30	Red	0.5	3.49	2.95
125831	203SW/C	20	10x30	White	0.5	3.49	2.65
125786	183SBK/C	18	16x30	Black	0.8	3.95	3.49
125735	183SR/C	18	16x30	Red	0.8	3.95	3.49
125751	183SW/C	18	16x30	White	0.8	3.95	3.25

30 AWG Tri-Color Wire/Dispenser Quickly cuts, strips and dispenses

wire from three separate spools.



Part No. Product No. Description **117807** WD-30-TRI Wire wrap, tri-color dispenser......**\$24.95** \$22.49

See page 131 for

Wire-Wrapping Tool

22 AWG Solid Hook-up Wire

600 Volts

2.25

2.25

1.95

2.49

- 105°C PVC insulation
- · Tinned copper • Temperature range: -55°C to +105°C
- MIL-W-16878D Type B Passes UL VW-1 flame test
- For use with breadboards such as the JE20 series (pg 108)

• Weight: 100' (0.3 lbs.); 1000' (3.8 lbs.)

Part No.	Product No.	Color 100 ft.	Part No.	Product No.	Color 1000 ft.
36767	122BE/C	Blue\$4.25	36775	122BE/K	Blue\$29.95
36791	122BK/C	Black4.25	36804	122BK/K	Black29.95
36821	122G/C	Green4.25	36839	122G/K	Green29.95
36855	122R/C	Red4.25	36863	122R/K	Red29.95
36880	122W/C	White4.25	36898	122W/K	White29.95
36919	122Y/C	Yellow4.25	36927	122Y/K	Yellow29.95

28 AWG Modular Telephone Cable

· Color coded conductors · Flat modular cable · PVC jacket

• Gray • 7 x 43 stranded • Weight: 0.02 lbs. per foot

Part No.	Product No.	Conductors	100 ft.	1000 ft.	10000 ft.
103430	MTC4	4	\$3.30	\$30.00	\$250.00
103448	MTC6	6	7.00	40.00	350.00
103450	MTC8	8	10.00	60.00	500.00

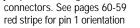




We carry major manufacturers - call for large OEM pricing.

28 AWG Gray Flat Ribbon Cable*

· Ideal for use with: insulation displacement DIP jumpers, card-edge connectors and socket



· Single edge · Weight: 0.08 lbs./ft.

103481

• Insulation: Polyvinyl chloride (PVC)

Voltage rating: 300V
 Center spacing: .05"

	, ,	, ,	0 0			0	
 Temper 	ature rating: -:	20°C to +80°C	 Stranded coppe 	er wire • 28 AWG (7 x 36)			
Part No.	Product No.	Conductors	10 ft.	25 ft.	100 ft.	500 ft.	
135538	171-10	10	\$1.49	\$3.20	\$10.00	\$40.00	
37671	171-16	16	1.75	4.00	12.50	57.00	
37719	171-20	20	1.95	4.50	16.00	65.00	
37760	171-25	25	3.25	7.00	20.00	90.00	
37807	171-26	26	3.49	8.00	20.50	95.00	
37840	171-34	34	4.25	9.25	27.00	95.00	
37911	171-37	37	4.95	11.75	25.00	115.00	
37920	171-40	40	4.95	11.75	32.00	145.00	
37954	171-50	50	6.75	14.50	40.00	170.00	
103481	171-60	60	8.95	17.75	42.00	200.00	

*Prepackaged and priced in increments of 10', 25' or 100'

28 AWG Multicolor Flat Ribbon Cable*

 Ideal for use with: insulation displacement DIP jumpers. card-edge connectors, socket connectors and IDC connectors



Standard 10 color repeat sequence
 Center spacing: 0.05"

• Temperature rating: -20°C to +80°C • Voltage rating: 300V • Wt.: .07 lbs./ft.

• Insulation: Polyvinyl chloride (PVC) • Stranded copper wire • 28 AWG (7 x 36)

Part No.	Product No.	Conductors	10 ft.	25 ft.	100 ft.	500 ft.			
112547	28RC10	10	\$1.95	\$4.50	\$17.50	\$70.00			
105671	28RC16	16	3.25	7.25	24.00	100.00			
105689	28RC20	20	3.95	9.00	30.00	125.00			
105697	28RC25	25	4.95	11.50	36.00	160.00			
105700	28RC34	34	6.75	15.00	45.00	210.00			
105726	28RC40	40	7.95	18.50	64.00	285.00			
105718	28RC50	50	9.95	23.00	73.00	325.00			
*D									

Prepackaged and priced in increments of 101, 251 or 100

RG Type Coaxial Cable*

RG6 (75 Ω): • Nom. capac. 16.2pf/ft. • Center resist. 1.1 Ω /3ft. @ 77°F **RG58/U & RG58A/U (50\Omega):** • Nom. capac. 27pf/ft. • Center resist. 10.4 Ω /1Kft. @ 77°F **RG59/U** (75 Ω): • Nominal capac. 19pf/ft. • Center resist. 16.5 Ω /1Kft. @ 77°F RG174/U (50 Ω): • Nominal capac. 30.8p f/ft. • Center resist. 97 Ω /1Kft. @ 77°E

	(0022)	3/1/1/10 Capac. 00:0pj/16: 00/16/103/36:7/22/1146: 07/1						
Part No.	Product No.	Description 100 ft.	1000 ft.					
177210	RG6	For CATV, Satellite\$20.00	\$160.00					
102226	RG58/U	For Ethernet, oscilloscopes (solid 20AWG)9.00	75.00					
116898	RG58A/U	For Ethernet, oscilloscopes (stranded 20AWG)14.00	100.00					
102218	RG59/U	For CATV and video patch cords (solid 22AWG) 11.00	80.00					
112037	RG174/U	For Ethernet, oscilloscopes (stranded 26AWG) 13.00	95.00					
	*Prenackaged and priced in increments of 100' or 1000'							

Thin Ethernet Coaxial Cable

- · Braided overall shield · Thin ethernet coaxial cable
- Stranded copper with center conductor
 RG58
 Meets IEEE 10Base2 specifications
- 500 impedance Prenackaged & priced in increments of 25' 100' & 250'

Jose impedance		Trepackagea & pricea in increments of 25, 100 & 250				
Part No.	Product No.	Description	25 ft.	100 ft.	250 ft.	
172507	A7H9907-250	Thin ethernet coaxial cable	\$7.00	\$18.00	\$35.00	

24 AWG 300V 2 Conductor Stranded Power/Speaker Cable



- Operating voltage: 300
- Stranded copper wire (7 x 32) Black wire with white polarity stripe

Product No. Color Wt. (lbs.) 100 ft. Part No. Product No. Color Wt. (lbs.) 1000 ft. 100280 224BK/C Black 100298 224BK/K Black 0.8. 7.8...\$39.95

24 AWG Twisted Pair Cable

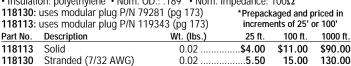
300 Volts: • 80C° • PVC insulation

- Stranded tinned wire (7 x 32) Reduced EMI
- . Mojaht, 100' (0 E lba), 1000' (4 7 lba)

• use 10	i nook up v	wire • weight:	100 (0.5	105.); 100	U (4.7 IDS.)	and the same of th	
Part No.	Product No.	Color	100 ft.	Part No.	Product No.	Color	1000 ft.
105911	224GW/C	Green/White	\$4.95	105806	224GW/K	Green/White:	\$39.95
173147	224RW/C	Red/White	4.25	173155	224RW/K	Red/White	.34.95
173163	224BW/C	Black/Mhite	4.49	173171	224BW/K	Black/White	34.95

Modular Data Network Cable* 24 AWG UTP Category 5

• 100MHz • Color: gray • 8C • 4 twisted pairs • Insulation: polyethylene • Nom. OD.: .189" • Nom. impedance: 100Ω



Modular Network Cable

24AWG UTP Category 5 Enhanced

• 350MHz • 8C 4 twisted pairs Color: gray
 Weight: 0.02 lbs

	54 pan 5 50.511 g. ay 115.g. 11 5.62 1.55			
Part No.	Description	25 ft.	100 ft.	1000 ft.
176225	Solid	\$5.00	\$14.00	\$80.00
176233	Stranded (24AWG)	6.00	18.00	150.00

176233

24 AWG Multiconductor Shielded Computer Communication Cable*

· Stranded copper wire, multi-colored insulation

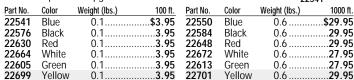
Insulated with polyvinyl chloride (PVC)
 Drain wire

24 AWG (7 x 32 AWG)
 Color: gray
 Voltage rating: 300V
 Shielded 100% w/ aluminum mylar
 *Prepackaged and priced in increments of 25' or 100'

Part No.	Prod. No.	Conductors	Diameter	Wt. (lbs.)	25 ft.	100 ft.	1000 ft.
31860	SC4	4	0.20"				\$110.00
31878	SC9	9	0.23"	0.03	9.75	25.00	190.00
31843	SC15	15	0.28"	0.05	13.75	35.00	210.00
31860 31878 31843 31851	SC25	25	0.37"	0.09	17.25	49.00	300.00

30 AWG Kynar™ Wire Wrap Wire

- Assorted color coded insulation
 Used for prototyping
- Color coded Kynar™ (Polyvindene Fluoride) insulation
- Silver plated copper (solid conductor)
 UL 1423
 Temperature: -40°C to +125°C
 See pg 59 for ww sockets
- Wire wrap tools on pg 131 Passes UL VW-1 flame test



. IAMECO Wire Connectors

- Material: UL approved white nylon 66, 94V2
- · Quick and secures method to splice control wires
- · Strip wire before application
- Twist on type
- * requires crimping tool. **UL/CSA** approved

December

Wire IDC 14 AWG

140716 Wire IDC 22-18 AWG

Wire IDC 18-14 AWG

10 piece minimum



182511





Blue

Blue

Red

.10 .09

.11

182457



182481

Part No.	Description	Material	Color	10	100	1000
182431	Crimp 22-16 AWG*	Nylon 66, 94-2	Natural	\$.04	\$.035	\$.03
182449	Crimp16-14 AWG*	Nylon 66, 94-2	Natural	.04	.035	.03
182457	Crimp12-10 AWG*	Nylon 66, 94-2	Natural	.08	.07	.06
182465	Crimp 8 AWG*	Nylon 66, 94-2	Natural	.10	.09	.08
182473	Wire-nut 18 AWG x 2	UREA Plastic	Yellow	.04	.035	.03
182481	Wire-nut 16 AWG x 3	UREA Plastic	Ivory	.04	.035	.03
182490	Wire-nut 16 AWG x 3	UREA Plastic	Yellow	.04	.035	.03
182502	Wire-nut 16 AWG	PVC w/ metal spring	Grey	.04	.035	.03
182511	Wire-nut 16 AWG	PVC w/ metal spring	Blue	.04	.035	.03
182529	Wire-nut 16 AWG	PVC w/ metal spring	Orange	.04	.035	.03
182537	Wire-nut 14 AWG	PVC w/ metal spring	Yellow	.08	.07	.06
182545	Wire-nut 12 AWG	PVC w/ metal spring	Red	.10	.09	.08
182553	Wire w/nut 12 AWG	Metal spring w/ wing	Yellow	.10	.09	.08
182561	Wire w/nut 10 AWG	Metal spring w/ wing	Red	.12	.11	.10

Nylon 66, 94-2

PE - metal inside

PE - metal inside





.07

.08

.05

.05

182570

3M Tape Wire Markers

- · For marking wires with numerical sequence
- Size: (tape) 96"L x 0.25"W; (dispenser) 2.4"L x 1.2"Dia
- · Includes cutting bar and eyelet for hanging
- Self adhesive tapes numbered 0-9
 Wt.: 0.2 lbs. Part No. Description

159231 Numerical tape dispenser ... \$32.95 \$29.95

Self Adhesive Wire Marker

- · Stick to wires for permanent identification
- · Cloth tape label numbered 0-9
- · Used extensively for cable diameter after or before terminal attachment



Cable Markers

UL approved natural nylon
182705: Size: 1.5"L x .75"W
182713: Size: 2.5"L x 1.76"W
. 10 piece minimum



Nvlon Cable ID Ties and Tabs

,		
	•	2
[□] 71061		3
71061: Clear ID tab (0.98 x 0.31)	135175	

135175: Nylon cable tie ID marker · Sold in increments of 10, 100 or 1000

Part No.	Size	10	100	1000
71061	4.0"L x 0.1"W	\$.10	\$.06	\$.04
135175	2.0"L x 0.8"W x .02"T	14	.10	.07

JAMECO Exterior Cable Ties

- · Contain carbonate for greater ultraviolet resistance
- Material: UL approved natural nylon 66, 94V2
- · Minimum tensile strength: 18 lbs.
- · Maximum bundle diameter:
- 30mm 55mm Weather • 100 pc. min Resistant 102676/102601.11\/

1020/0/102004. 0 V		7.	0312 Ser	ies
Part No.	Product No.	Size ("L x "W)	100	1000
182650	0301CV-140S	5.5 x .13	\$.049	\$.039
182668	0301CV-200S	8.0 x .13	049	.039
182676	0301CV-120W	4.75 x .13	059	.049
182684	0301CV-200W	8.0 x .18	09	.08
182692	0312MCV-2009	S 80 x 10	09	08

AC Cord Cable Tie

rtcusu	DIC		
Color:	black	· Length: 6"	
Part No	Desci	rintion	100

Color:	black • Length: 6"		
Part No.	Description	100	1000
183185	Cable tie	\$.09	\$.08

Cable Tie Tools



- 2.5 5mm W Economical pocket type
- · Twist to cut surplus tie end

Part No.	Product No.	1	10	100
73402	0302TG-6	\$10.95	\$9.95	\$8.95
182297	0302TG-7	19.95	17.95	15.95
182271	0302TG-3	49.95	45.95	39.95

JAMECO Cable Clamps

· Tie mount cable clamps

182342 0520FC-2

Part No.

70594 171213

71407

71394

71386

173761

173711

173729

173737

173745

134754

173753

.16

.18

0301 Series

Material: UL approved nylon 66, 94V-2

· 10 piece minimum

Part No.	Product No.	Description 10	100	1000
182941	0505HC-101S	Tie mount cable .75"D; 4-way self adhesive\$.07	\$.06	\$.05
182300	0510HC-2	Tie mount cable .5"D; #6 screw	.035	.03
182318	0519ATC-17	Tie mount cable .7"D ADJ; 2-way #6 screw39	.35	.32
182376	0519ATC-22	Tie mount cable .9"D ADJ; 2-way #6 screw44	.39	.35
182334	0520FC-1	Tie mount cable .1"D; self adhesive	.06	.05





182318



Nylon Cable Tie Mounts and Cable Clamps

Tie mount cable .2"D; self adhesive08

- · Screw tab & cradle mount adhesive
- · Used with nylon cable ties at left

· Sold in increments of 10, 100 or 1000





.15

.15

.10

.04

.04

.04



increments of 10, 100 or 1000				
Description	10	100	1000	
0.8"L x 0.4"W screw 4-way cable tie, used w/	0.2"W max \$.15	\$.10	\$.06	
0.5" square adhesive 4-way cable tie, used w	/ 0.1"W max15	.10	.06	173761
0.9" square adhesive 4-way cable tie, used w	/ 0.1"W max17	.13	.09	

.11

.11

.06

.025

.025

.025

.035

.035





JAMECO Stand Off Twist and Saddle Fasteners

Material: UL approved natural nylon 66, 94V2
 Effective cable securing method

1.1" square adhesive 4-way cable tie, used w/ 0.2"W max..... .19

1.1" square adhesive 2-way cable tie, used w/ 0.4"W max...... .19

• For directing and gathering cables at low cost • Easy to install

1202 Series: locks into 4.8mm hole with fingertip pressure 10 piece minimum

Part No.	Product No.	Description	10	100	1000
182625	1205ST-0560	Twist tie .2" W	\$.08	\$.07	\$.06
182633	1205ST-1112	Twist tie .4" W	8	.07	.06
182641	1205ST-1247	Twist tie .5" W	8	.07	.06
182588	1202KWS-0N	Lock, Sad1" W	8	.07	.06
182596	1202KWS-1N	Lock, Sad3" W	8	.07	.06
182609	1202KWS-2N	Lock, Sad7" W	8	.07	.06
182617	1202KWS-3N	Lock, Sad. 1" W	10	.09	.08



1205 Series



Nylon Cable Ties

Standard (clear)

Cable ties made from UL approved nylon 6/6

 Temper 	ature range:	40°C to +85°C • Flamal	oility rating: UL 94V-2		70	560
Part No.	Description	Tensil Strength	Dimensions	100	1000	
70560	Cable tie	18 lbs.	3.1"L x 0.1"W	\$.025	\$.015	
126543	Cable tie	18 lbs.	4.0"L x 0.1"W		.015	
139150	Cable tie	18 lbs.	8.0"L x 0.1"W		.02	
70906	Cable tie	40 lbs.	5.8"L x 0.1"W		.02	



Weather Resistant (black)

vvcatric	i itosistarit (i	olacky			
	n Carbonate A f nce to ultra viol	or greater et rays in outdoor use	UV Resistant	71 B-	
Part No.	Description	Tensil Strength	Dimensions	100	1000
139125	Cable tie	18 lbs.	3.0"L x 0.9"W	\$.025	\$.015
104141	Cable tie	18 lbs.	4.0"L x 0.1"W	025	.015
104133	Cable tie	40 lbs.	5.8"L x 0.1"W	03	.02
139141	Cable tie	50 lbs.	4.8"L x 0.18"W		.02



		-
į		É

9.95



104141

Cable Tie Assortments · Tension strength: 18-50 lbs.

145701: 1000 pcs. (4"L) 150412: 500 pcs. (4"L); 300 pcs. (8"L); 50 pcs. (11"L)

	i ait ivo.	Description	Wt. (IDS.)		10
,	145701	Canister pack, 10 colors (1000 pcs.)	0.7	\$9.49	\$8.49
,	150412	Canister pack, 5 colors (850 pcs.)	1.7	13.95	11.49









Reusahle

Coaxial Cable Assemblies and Cable Accessories

PVC and Polyolefin Heat Shrink Tubing - 39" (1 Meter Length)

- 2:1 uniform shrink ratio
- · Color: black · Will not cold
- flow or melt
- · Temperature range: -45°C to +125°C
- Shrink temperature: 175°C
- See page 95 for heat guns
- · Length 39" (1 meter), sold as 1 increment
- · Weight: .01 lbs.

PVC Heat Shrink Flat Film

Part No.	Flat	Unshrunk Cir. Dia.	Shrunk Cir. Dia.	1	10	100
70631	5/16"	1/4"	1/8"	.\$.49	\$.39	\$.29
70623	1/2"	5/16"	3/16"	55	.45	.25
70666	13/16"	9/16"	1/4"	55	.45	.25

Polyolefin Heat Shrink Tubing

- Dielectric strength: 1300V Flexible
- · Shrink temperature: 121°C · Flame retardant

Part No.	Before	After (Dia.)	1	10	100
71327	1/16"	1/32"	\$.59	\$.49	\$.39
71870	3/32"	3/64"	65	.55	.39
71280	1/8"	1/16"	75	.59	.49
72063	1/4"	1/8"	99	.79	.65

PVC Heat Shrink Tubing

- · 2:1 uniform shrink ratio
- Color: black
- Shrink temp: 125°C
- · Sold in 10' and 100' increments
- UL/CSA approved
- · See page 123 for heat guns

Part No.	Product No.	Dia.(mm) before	10	100
184721	0927F32-3	.12" (3)	.\$1.19	\$10.49
182730	0927F32-4	.16" (4)	1.39	12.49
182748	0927F32-5	.20" (5)	1.45	12.95
182756	0927F32-6	.24" (6)	1.49	13.49
182764	0927F32-8	.31" (8)	1.79	15.95
182772	0927F32-11	.43" (11)	2.49	22.49
182781	0927F32-15	5 .59" (15)	2.95	26.49

TECHFLEX- Cable Sleeve

182748

182772

Clean Cut Expandable Sleeving

- · Cuts w/ ordinary scissors without fraying
- · Applications: protecting wires,
- cables and hoses

•	Operating	temperature:	-70°C to	125°C
	operating	torriporataro.	, 0 0 10	1200

Part No.	Product No.	Actual/Expanded Dia.	1	10
162149	CCPT1X	.093"/.250"	.\$9.95	\$8.49
162157	CCPT2X	.125"/.440"	.11.95	10.49
162165	CCDT3X	250"/ 750"	1/1 05	13 //0

JAMECO Strain Relief Bushings Material: III approved nylon 66, 94V-2 Color: black

Sold in spools of 25'

IVICITO	ii. OL uppi ovcu ii	yioii 00, 74 v Z	OOIOI . DIUCK			
 Series 	 Series 0705SR tool: P/N 73470 (right) 10 piece minimum 					
Part No.	Product No.	Description	10	100	1000	
182385	0705SR-F51	Flat, SPT3, S	\$.07	\$.06	\$.05	
182393	0705SR-F53	Flat, SPT3, L		.06	.05	
182406	0705SR-F41	Flat, SPT2, S		.035	.03	
182414	0705SR-F42LF	Flat, SPT2, R	19	.17	.15	
182422	0705SR-F42L	Flat, SPT 1/2, R		.13	.11	
182351	0705SR-5R2	Round, SVI/SVT		.06	.05	
182369	0705SR-6R1	Round, SJ/SJT; 16 AW	G	.06	.05	
182377	0705SR-6P1	Round, SJC; 18 AWG		.06	.05	

We carry major manufacturers - call for OEM pricing.

Assembled COAX Cables

RG6 75Ω Cables

· Assembled cables with BNC and F



type connectors		176794	177	228
Part No.	Description	1	10	50
176794	3' BNC to BNC	\$2.25	\$1.95	\$1.75
176815	6' BNC to BNC	2.75	2.25	1.95
177228	3' F to F type	2.25	1.95	1.75
176807	6' F to F type	2.49	2.25	1.95

JAMECO F-type

75 Ω Cables

- · Typical application: F connector (VCR)
- Low signal loss
- Made of high-quality

75Ω RG59 cable • Strain relief • Weight: 0.2 lbs.

					,	
Part No.	Product No.	Cable	Length	1	10	100
85585	FS3FS	RG59/U	4.5 ft.	\$.85	\$.65	\$.45

J<u>AMECO</u> Coaxial Cable Stripper

- · Strips RG58, 59 and 62 cable Heavy duty black plastic
- · Replaceable blades
- Size: 4.2"L x 0.8"W Weight: 0.1 lbs.

OILO.	1.2 E X 0.0 VV VVolgitt. 0.1 105.		
Part No.	Description	1	10
73066	3 bladed coax cable stripper\$12.9	95	\$10.49

Braided Nylon Lacing Tape

- · Waxed finish
- · Color: natural · Braided
- · Excellent knot retention
- · Meets specification: MIL-T-43435B type 1 size 3 finish B
- Size: .085"W x 500 yards long Weight: 0.6 lbs.

Part No.	Description	 1	10
174369	Lacing Tape	 \$19.95	\$17.95

Black Electrical PVC Tape (30')

- · Flame retardant
- · Cold and weather resistant
- UL approved Length: 30'
- Maximum voltage: 600V
- Maximum temperature: 80°C

 Size: 7 	mil thick x .75"W x 30'L	• W	eight: 0.1	lbs.
Part No.	Description	1	10	10
150527	Electrical tape\$.	75	\$.59	\$.4

Bushing Assembly Tool

Stainless

73470

· For use with series 0705SR strain relief bushings (below) Part No. Product No.





182414

182369

Assembled BNC Coax Cables



85542 · Pre-assembled with male coax connectors

P/N 152311 has male and female coax connectors

RG58/U 50Ω Cables

 For Ethernet networks, oscilloscopes Weight: 2.2 lbs. 						
Part No.	Product No.	Length	1	10	50	100
181307	CRG58-1RR	1 ft\$	2.49	\$2.25	\$1.95	\$1.75
102314	CRG58-1	1.5 ft	.2.25	1.95	1.75	1.49
11404	CRG58-3 ★	3 ft	.2.75	2.49	2.25	1.95
102331	CRG58-6	6 ft	.3.25	2.75	2.49	2.25
152311	RG58MF-6	6 ft	.2.49	2.25	1.65	1.35
180822	CRG58-10	10 ft	.3.95	3.49	2.75	2.25
102349	CRG58-12	12 ft	.4.49	3.95	3.49	2.75
169818	CRG58-15	15 ft	.4.39	3.95	2.95	2.65
180849	CRG58-22	22 ft	.4.95	4.49	3.95	3.49
102357	CRG58-25	25 ft	.5.49	4.95	4.49	3.49
102365	CRG58-50	50 ft	.7.95	6.95	4.95	4.49
102381	CRG58-100	100 ft1	13.49	11.95	10.95	9.49

RG59/U 75 Ω Cables

• For CATV and video patch cords • Weight: 0.4 lbs.

Part No.	Product No.	Length	1	10	50	100
86471	CRG59-1	1.5 ft	\$2.49	\$2.25	\$1.75	\$1.49
85542	CRG59-6	6 ft	2.95	2.49	2.25	1.95
102373	CRG59-12	12 ft	4.49	3.95	3.25	2.49

RG174/U 50Ω Cables

• For Ethernet networks, oscilloscopes • Wt.: 0.1 lbs. Part No. Product No. Length 1 10 **111472** RG174U3 3 ft.\$3.25 \$2.75 \$2.49 \$1.95 111481 RG174U6 6 ft.3.49 2.95 2.75 2.25

Assembled SMA/SMB 50 Ω Coax





175118 / 159370 / 159396

Part No. Product No. Cable Length



175118/159370/159396: SMA male to SMA male 153381/153390/159450: SMA male to SMA male **175126/175134:** SMA male to SMA right angle male 175142/175151: SMA rt. angle male to SMA rt. angle male 175169/175177: SMB male to SMB male

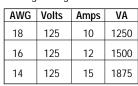
175118	CSMA805	RG58	0.5 ft. \$3.25	\$2.75	\$2.49
159370	CSMA82	RG58	2.0 ft 3.95	3.49	2.75
159396	CSMA86	RG58	6.0 ft 4.95	4.49	3.49
169800	CSMA05	RG174	0.5 ft 3.75	3.25	2.75
163854	CSMA1	RG174	1.0 ft 3.95	3.49	2.75
153381	CSMA2	RG174	2.0 ft 4.25	3.75	2.95
153390	CSMA4	RG174	4.0 ft 4.95	3.95	3.49
159450	CSMA6	RG174	6.0 ft 5.75	5.25	4.75
175126	CSMAR05	RG174	0.5 ft 4.49	3.95	3.49
175134	CSMAR1	RG174	1.0 ft 4.75	4.25	3.75
175142	CSMARR05	RG174	0.5 ft 5.49	4.95	4.49
175151	CSMARR1	RG174	1.0 ft 5.75	5.25	4.75
175169	CSMB05	RG174	0.5 ft 3.95	3.49	2.95
175177	CSMB1	RG174	1.0 ft 4.25	3.75	3.25



10

Line, Computer and Power Cords 71

- · Molded connectors
- UL/CSA/VDE approval listed below
- Excellent resistance to jacket abrasion
- Temperature: -20°C to 60°C
- · Voltage rating: 300 volts







Line Cord (Fig. 1)







Power Cord (Fig. 2)

Shielded Power Cord (Fig. 3)



184815 (Fig. 4)

Computer Power Cord (Fig. 5)

RFI Power Cord (Fig. 6) Right Angle Computer (Fig. 7)

Piggy-Backed Computer (Fig. 8)

124433 ST0 152186 171 42041 177 146309 PC 146317 PC 173809 174 37997 172 37997 172 38009 172 38009 172 38025 172 160995 177 102007 175 166924 175 184840 176 100271 176 177375 E14 184815 176	74713 7106BG 7106BG 7106 7	2-conductor power cord with pigtail with strain relief 2-conductor power cord (round) with pigtail 2-conductor power cord (round) with pigtail 3-conductor power cord with pigtail	.13 .16 .20 .25 .31 .41 .39 .37 .30	UL/CSA UL/CSA UL/CSA UL/CSA UL/CSA UL/CSA UL/CSA UL/CSA	1 1 1 1 1 1 2	5 ft. 6 ft. 6 ft. 6 ft. 6 ft. 8 ft.	Gray Black Beige Black Black Black	18/2 18/2 18/2 18/2 18/2	SPT-1 SPT-2 SPT-2 SPT-2 SJT	\$1.09 1.25 .75 1.19 .59	\$.89 .99 .59 .99	\$.75 .79 .45 .89	\$.59 .65 .29 .75
152186 1771 42041 1771 146309 PC: 146317 PC: 173809 174 159409 174 37997 172 174545 172 38009 172 160995 177 102007 175 102007 175 184840 176 100271 176 177375 E14 184815 176	7106BG 7106 7106 7106 71082J6 7105 7405 7405B 7236 7236 7237 7238 7720 7535B	2-conductor power cord with pigtail 2-conductor power cord with pigtail with strain relief 2-conductor power cord (round) with pigtail 2-conductor power cord (round) with pigtail 3-conductor power cord with pigtail with strain relief 3-conductor power cord with pigtail	.20 .25 .31 .41 .39 .37	UL/CSA UL/CSA UL/CSA UL/CSA	1 1 1	6 ft. 6 ft. 6 ft.	Beige Black Black	18/2 18/2 18/2	SPT-2 SPT-2 SJT	.75 1.19	.59 .99	.45	.29
42041 171 146309 PC 146317 PC 173809 174 159409 174 37997 172 38009 172 38009 172 38025 172 160995 177 102007 175 184840 176 100271 176 177375 E14 184815 176 103747 172	7106 PC182J6 PC182J8 7405 7405B 7236 72365 7237 7238 7720 7535B	2-conductor power cord with pigtail with strain relief 2-conductor power cord (round) with pigtail 2-conductor power cord (round) with pigtail 3-conductor power cord with pigtail with strain relief 3-conductor power cord with pigtail	.25 .31 .41 .39 .37	UL/CSA UL/CSA UL/CSA UL/CSA	1 1 1	6 ft. 6 ft.	Black Black	18/2 18/2	SPT-2 SJT	1.19	.99	.89	
146309 PC 146317 PC 173809 174 159409 174 37997 172 174545 172 38009 172 38025 172 160995 175 166924 175 184840 176 177375 E14 184815 176 103747 172	PC182J6 PC182J8 7405 7405B 7236 72365 7237 7238 7720 7535B	2-conductor power cord (round) with pigtail 2-conductor power cord (round) with pigtail 3-conductor power cord with pigtail with strain relief 3-conductor power cord with pigtail	.31 .41 .39 .37	UL/CSA UL/CSA UL/CSA	1	6 ft.	Black	18/2	SJT				.75
146317 PC 173809 174 159409 174 37997 172 174545 172 38009 172 38025 172 160995 175 166924 175 184840 176 177375 E14 184815 176 103747 172	7405 7405 7405B 7236 72365 7237 7238 7720 7535B	2-conductor power cord (round) with pigtail 3-conductor power cord with pigtail with strain relief 3-conductor power cord with pigtail	.41 .39 .37 .30	UL/CSA UL/CSA	1					.59	.45	.35	
173809 174 159409 174 37997 172 174545 172 38009 172 38025 172 160995 175 102007 175 164924 175 184840 176 177375 E14 184815 176 103747 172	7405 7405B 7236 72365 7237 7238 7720 7535B	3-conductor power cord with pigtail with strain relief 3-conductor power cord with pigtail	.39 .37 .30	UL/CSA		8 ft.	Black	18/2	CIT			I	.25
159409 174 37997 172 174545 172 38009 172 38025 172 160995 177 102007 175 184840 176 100271 176 177375 E14 184815 176 103747 172	7405B 7236 72365 7237 7238 7720 7535B	3-conductor power cord with pigtail 3-conductor power cord with pigtail 3-conductor power cord with pigtail with strain relief 3-conductor power cord with pigtail	.37		2			10/2	SJT	.55	.45	.35	.25
37997 172 174545 172 38009 172 38025 172 160995 177 102007 175 166924 175 184840 176 100271 176 177375 E14 184815 176 103747 172	7236 72365 7237 7238 7720 7535B	3-conductor power cord with pigtail 3-conductor power cord with pigtail with strain relief 3-conductor power cord with pigtail	.30	UL/CSA		6 ft.	Gray	18/3	SJT	2.49	2.25	1.95	1.75
174545 172 38009 172 38025 172 160995 177 102007 175 166924 175 184840 176 100271 176 177375 E14 184815 176 103747 172	72365 7237 7238 7720 7535B	3-conductor power cord with pigtail with strain relief 3-conductor power cord with pigtail			2	6 ft.	Black	18/3	SJT	2.95	2.49	2.25	1.95
38009 172 38025 172 160995 177 102007 175 166924 175 184840 176 100271 176 177375 E14 184815 176 103747 172	7237 7238 7720 7535B	3-conductor power cord with pigtail	.35	UL/CSA	2	6 ft.	Black	18/3	SVT	2.49	2.25	1.95	1.75
38025 172 160995 177 102007 175 166924 175 184840 176 100271 176 177375 E14 184815 176 103747 172	7238 7720 7535B			UL/CSA	2	6 ft.	Black	18/3	SVT	2.25	1.95	1.49	1.25
160995 177 102007 175 166924 175 184840 176 100271 176 177375 E14 184815 176 103747 172	7720 7535B	3-conductor power cord with pigtail	.31	UL/CSA	2	6 ft.	Gray	18/3	SVT	2.49	2.25	1.95	1.75
102007 175 166924 175 184840 176 100271 176 177375 E14 184815 176 103747 172	7535B	o consector power core with pigtan	.39	UL/CSA	2	8 ft.	Black	18/3	SVT	2.95	2.49	2.25	1.95
166924 175 184840 176 100271 176 177375 E14 184815 176 103747 172		3-conductor power cord with pigtail, shielded	.44	UL/CSA	3	8 ft.	Black	18/3	SVT	1.95	1.75	1.49	1.25
184840 176 100271 176 177375 E14 184815 176 103747 172		3-conductor power cord with pigtail	.49	UL/CSA	2	10 ft.	Black	18/3	SVT	2.95	2.49	2.25	1.95
100271 176 177375 E14 184815 176 103747 172	7516	3-conductor power cord with pigtail	.67	UL/CSA	2	6 ft.7"	Black	14/3	SJT	2.95	2.49	1.95	1.75
177375 E14 184815 176 103747 172	7629BG8	3-conductor power cord with pigtail	.83	UL/CSA	2	8 ft.	Beige	14/3	SJT	3.49	2.95	2.49	1.95
184815 176 103747 172	7629B	3-conductor power cord with pigtail	.88	UL/CSA	2	9 ft.	Black	14/3	SJT	3.95	3.49	2.95	2.49
103747 172	141445	3-conductor power cord with pigtail	.26	UL/CSA	2	3 ft.	Black	16/3	SJT	1.95	1.75	1.49	1.25
	7629BR	3-conductor right angle power cord with pigtail	.77	UL/CSA	4	7 ft.	Black	14/3	SJT	3.95	3.49	2.75	2.49
172542 174	7248	3-conductor detachable power supply cord	.34	UL/CSA	5	6 ft.	Gray	18/3	SVT	2.95	2.49	1.95	1.49
173542 176	7660GY	3-conductor detachable power supply cord, shielded	.42	UL/CSA	5	6 ft.	Gray	18/3	SVT	3.95	3.49	2.75	2.49
38041 172	7249	3-conductor detachable power supply cord	.37	UL/CSA	5	6 ft.	Beige	18/3	SVT	3.25	2.75	2.25	1.75
38050 172	7250	3-conductor detachable power supply cord	.36	UL/CSA	5	6 ft.	Black	18/3	SVT	3.75	3.25	2.75	2.25
161761 177	7742	3-conductor detachable power supply cord, shielded	.40	UL/CSA	5	6 ft.	Black	18/3	SVT	3.49	2.95	2.49	1.95
132118 175	7500	3-conductor detachable power supply cord	.44	UL/CSA	5	6 ft.	Black	18/3	SJT	3.95	3.49	2.95	2.49
171096 177	7758	3-conductor detachable power supply cord	.60	UL/CSA	5	8 ft.	Black	18/3	SJT	3.49	2.95	2.25	1.95
159492 175	7501G	3-conductor detachable power supply cord	.45	UL/CSA	5	6 ft.	Gray	18/3	SJT	2.95	2.49	1.95	1.75
159361 17 <i>6</i>	7602	3-conductor detachable power supply cord	.57	UL/CSA	5	6 ft.	Black	16/3	SJT	2.95	2.49	1.95	1.75
142607 WT	VTP-003	3-conductor detachable power supply cord, shielded	.63	UL/CSA	5	6 ft.	Black	16/3	SJT	3.49	2.95	2.25	1.95
125541 175	7504	3-conductor detachable power supply cord	.71	UL/CSA	5	6 ft.7"	Black	14/3	SJT	4.25	3.75	3.25	2.75
146069 VM	/M0232S	3-conductor detachable power supply cord w/RFI filter	.73	UL/CSA	6	6 ft.8"	Gray	18/3	SJT	2.25	1.95	1.49	1.25
117583 175	7502	3-conductor detachable power supply cord	.37	UL/CSA	5	8 ft.	Gray	18/3	SVT	2.95	2.49	2.25	1.75
102023 175	7501	3-conductor detachable power supply cord	.55	UL/CSA	5	10 ft.	Black	18/3	SVT	4.25	3.75	3.25	2.49
163361 695	952299	3-conductor detachable power supply cord	.33	UL/CSA	5	14 ft.	Black	18/3	SJT	4.95	4.49	3.95	2.95
117356 812	3120-6177	3-conductor detachable right angle power supply cord	.41	UL/CSA	7	6 ft.	Gray	18/3	SVT	3.49	2.95	2.49	1.95
38076 172	7250R	3-conductor detachable right angle power supply cord	.54	UL/CSA	7	6 ft.	Black	18/3	SVT	3.49	2.95	2.49	1.95
173251 172	7250RS	3-conductor detachable right angle power supply cord, shielded	.40	UL/CSA	7	6 ft.	Black	18/3	SVT	3.49	2.95	2.49	1.95
177383 175	7507	3-conductor detachable right angle power supply cord	.66	UL/CSA	7	10 ft.	Black	18/3	SJT	4.95	4.49	3.95	3.49
163416 176	7608G	3-conductor detachable right angle power supply cord	.36	UL/CSA	7	6 ft.	Gray	16/3	SJT	3.49	2.95	2.49	2.25
172312 812	120-5395	3-conductor detachable power supply cord right angle	.73	UL/CSA	7	8 ft.	Black	16/3	SJT	4.95	4.49	3.95	3.49
84937 17 <i>6</i>		3-conductor detachable piggy backed computer power cord	.47	UL/CSA	8					1.75			

^{*} Cordage Type: SPT-1 and SPT-2 (Flat Cord); SJT, SVT and VDE (Round Cord) • Thermoplastic Jacket Type: SPT-1: Light duty; SPT-2: Junior duty; SVT: Light service; SJT: Junior service





72 Line, Computer and Power Cords (Continued)













Power Supply Extension (Fig. 9)

Shielded Power Cord (Fig. 10)

Monitor Power Adapter (Fig. 11)

173892 (Fig. 12)

Hospital Grade Power (Fig. 13)

173884 (Fig. 14)

Part	Product		Weight	Agency	Plug				Cord		Prici	ng	
Number	Number	Description	(lbs.)	Approvals	Fig.	Length	Color	AWG	Type*	1	10	100	250
28468	PEC	3-conductor computer power supply extension cord	.36	UL/CSA	9	6 ft.	Black	18/3	SVT	\$3.25	\$2.75	\$2.25	\$1.95
121291	PEC2	3-conductor computer power supply extension cord	.55	UL/CSA	9	8 ft.	Black	18/3	SJT	3.95	3.49	2.95	2.49
177439	PECBGE	3-conductor computer power supply extension cord	.36	UL/CSA	9	6 ft.	Beige	18/3	SVT	2.95	2.49	1.95	1.75
170157	IS15	3-conductor right angle power supply extension cord	.34	UL/CSA	10	5 ft.	Beige	18/3	SVT	1.95	1.75	1.49	1.15
177447	MPC1	3-conductor monitor power adapter cord	.16	UL/CSA	11	1 ft.	Black	18/3	SVT	1.95	1.75	1.49	1.25
26382	MPC6	3-conductor monitor power adapter cord	.40	UL/CSA	11	6 ft.	Black	18/3	SVT	3.95	3.49	2.75	2.49
177455	MPC10	3-conductor monitor power adapter cord	.52	UL/CSA	11	10 ft.	Black	18/3	SVT	4.95	4.49	3.95	3.49
175855	PECUL10	3-conductor computer power supply extension cord	.53	UL/CSA	9	10 ft.	Black	18/3	SVT	4.49	3.95	3.49	2.95
173892	34J88T-1	3-conductor power cord w/ pigtail hospital grade (green dot)	.65	UL/CSA	12	8 ft.	Black	18/3	SJT	4.49	3.95	3.25	2.95
115078	17006	3-conductor power cord w/ hospital grade male (green dot)	.84	UL/CSA	13	10 ft.	Black	16/3	SJT	6.95	6.25	5.59	4.95
132011	17006G	3-conductor power cord w/ hospital grade male (green dot)	.82	UL/CSA	13	10 ft.	Gray	16/3	SJT	6.95	6.25	5.59	4.95
173884	3472WJ698G	3-conductor power cord w/ hospital grade male rt ang (green dot)	.85	UL/CSA	14	9 ft.	Gray	16/3	SJT	4.95	4.49	3.95	3.49
* 0	I T CDT 4	LODT O (EL LO II) CIT CUT LUDE (D. LO II) TI			CDT 4								

^{*} Cordage Type: SPT-1 and SPT-2 (Flat Cord); SJT, SVT and VDE (Round Cord) • Thermoplastic Jacket Type: SPT-1: Light duty; SPT-2: Junior duty; SVT: Light service; SJT: Junior service

International Power Cords and Adapters

JAMECO and PACKARD International Power Cords







172195 (Fig. 2)



173841 (Fig. 3)



174633 (Fig. 4)



177341 (Fig. 5)

· Molded connectors

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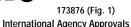
Voltage rating: 300 volts

• Excellent resistance to jacket abrasion

• IMQ: Instituto Italiano del marchio di Qualita

· BSI: British Standard Institution

· SA: Standards of Australia



	micomatic	,,,a,,	וקוי נטויטפ	Jiovais	
Germany	VDE	<u></u>	France	LCIE	(1)
Austria	OVE	(VE)	Netherlands	KEMA	KEMA
Belgium	CEBEC	CEBEC	Norway	NEMKO	Ø
Denmark	DEMKO	(D)	Sweden	SEMKO	\bigcirc
Finland	FIMKO	Ē	Switzerland	SEV	(\$)







Fig. 6

Part	Product			Weight	Agency	Plug			AWG	Cord		Pric	ing	
Number	Number	Country	Description	(lbs.)	Approváls	Fig.	Length	Color	Conduction	Туре	1	10	100	250
173868	2171H576G	Europe	3-conductor detachable power cord	0.4	Fig. 6	1A	6 ft.	Gray	3/.75mm ²	H05VVF	\$2.95	\$2.49	\$2.25	\$1.95
117911	PCVDE-6B	Europe	3-conductor detachable power cord	0.4	Fig. 6	1A	6 ft.	Black	3/.75mm ²	H05VVF	4.25	3.75	3.25	2.75
173876	21H516S	Europe	3-conductor detachable power cord w/ pigtail	0.4	Fig. 6	1C	5 ft.	Black	3/1.0mm ²	H05VVF	2.95	2.49	2.25	1.95
138270	H05VVF	Europe	3-conductor detachable power cord	0.4	Fig. 6	1A	6 ft.	Beige	3/1.0mm ²	H05WF/HAR	4.25	3.75	3.25	2.75
147897	CL102	Europe	3-conductor power cord right angle	0.4	Fig. 6	3A	6 ft.	Black	3/.75mm ²	H05VVF	3.49	2.95	2.49	2.25
173841	2271H376G	Europe	3-conductor detachable power cord right angle	0.4	Fig. 6	3A	6 ft.	Gray	3/.75mm ²	H03VVF	3.49	2.95	2.49	1.95
173850	2271H518G	Europe	3-conductor detachable power cord right angle	0.6	Fig. 6	3A	8 ft.	Gray	3/1.0mm ²	H05VVF	3.95	3.49	2.95	2.49
171934	8120-6174	Europe	3-conductor detachable power cord right angle	0.5	Fig. 6	1B	7.5 ft	Beige	3/.75mm ²	H05WF/HAR	2.49	2.25	1.75	1.49
173817	KC-015A	Europe	3-conductor detachable power cord	0.9	Fig. 6	1A	14 ft.	Black	3/1.0mm ²	H05VVF	3.95	3.49	2.95	2.49
177341	86559011	India/Africa	3-conductor detachable power cord	0.7	VDE	5A	9 ft.	Black	3/1.0mm ²	HAR	5.95	5.49	4.95	4.49
172195	8120-6979	Italy	3-conductor detachable power cord right angle	0.4	IMQ	2B	6 ft.	Gray	18/3	SVT	3.49	2.95	2.49	1.95
184891	WS-012A	UK/Ireland	3-conductor detachable power cord	0.6	Fig. 6	5A	6 ft.	Black	3/1.0mm ²	H05VVF	4.95	4.49	3.95	3.49
174633	21071H5182	UK/Ireland	3-conductor detachable power cord	0.7	ASTA/CE	4A	8 ft.	Black	3/1.0mm ²	H05VVF	5.95	5.49	4.49	3.95

JAMECO International Power Adapters

• Use as power cord replacements for table-top power supplies (see page 91)

Molded PVC construction
 Removes excess cordage form work area

176188: NEMA5-15P to IEC-C13; USA **176209:** CEE7 to IEC-C13: European **176196:** BS1363/A to IEC-C13: UK











170170. 2	00001	I TO ILO	013.0
176217 : J	apan to	IEC-C13	3: Japar

1/021/.	Japan to ILC-C 13. Japan			1/6188	1/6209		1/6196		1/621/
Part No.	Description	Rating	Agency	Country	Weight (lbs.)	1	10	100	250
176188	Right angle power adapter	10A @ 115VAC		USA	0.1	\$1.95	\$1.75	\$1.49	\$1.25
176209	Right angle power adapter	16A @ 250VAC	TUV	Europe	0.2	2.49	2.25	1.95	1.75
176196	Right angle power adapter	13A @ 250VAC	_	UK	0.2	3.95	3.49	2.95	2.65
176217	Right angle power adapter	15A @ 125VAC	_	Japan	0.1	2.49	1.95	1.75	1.49

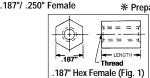


Aluminum & Brass Threaded Standoffs

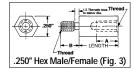
† Finish: Iridite (clear)² per MIL-C-5541-D; bright tin plate3; stainless steel3

Hex .250" Male/Female * Prepackaged: order in increments of 10, 100 or 1000









.187" Hex Threaded Female Standoffs 4-40 Thread (Fig. 1) .187" Hex

Part		Hex		Pr	icing	
Number	Metal [†]	Length	1	10	100	1000
175636	Brass ²	.187"	*	\$.15	\$.12	\$.06
133612	Alum ¹	.250"	*	.17	.14	.10
133639	Alum ¹	.500"	*	.19	.15	.12
139791	Alum ¹	.562"	*	.15	.09	.05
133647	Alum ¹	.625"	*	.25	.19	.15
133655	Alum ¹	.750"	*	.35	.29	.22
139184	Alum ¹	1.000"	.35	.29	.22	.17

.250" Hex Threaded Female Standoffs 4-40 Thread (Fig. 2) .250" Hex

Part		Hex	Pricing						
Number	Metal [†]	Length	1	10	100	1000			
139192	Alum ¹	.250"	*	\$.15	\$.12	\$.09			
77500	Alum ¹	.375"	*	.17	.14	.11			
134762	Alum ¹	.437"	*	.15	.12	.09			
108370	Alum ¹	.500"	*	.22	.17	.14			
77518	Alum ¹	.625"	*	.29	.25	.19			
133604	Alum ¹	.750"	*	.29	.25	.19			
139205	Alum ¹	1.000"	.35	.29	.25	.19			

.250" Hex Threaded Female Standoffs 6-32 Thread (Fig. 2) .250" Hex

Part		Hex		P	ricing	
Number	Metal [†]	Length	1	10	100	1000
77534	Alum ¹	.250"	*	\$.19	\$.15	\$.12
133591	Alum ¹	.375"	*	.19	.15	.12
77542	Alum ¹	.500"	*	.22	.17	.12
77551	Alum ¹	.625"	*	.22	.17	.12
77569	Alum ¹	.750"	*	.25	.19	.15
77577	Alum ¹	1.000"	.35	.29	.25	.17
143407	Alum ¹	1.500"	.49	.39	.32	.27
143440	Alum ¹	1.750"	.49	.39	.32	.27
175644	Alum ¹	4.000"	.59	.49	.39	.35

.250" Round Hinged Threaded Standoffs 6-32 Thread (both ends)







Part No.	Type	L	A	В	C
166908	Male/Male	.500"	.312"	_	.172"
143520	Female/Female	.750"	.371"	.371"	.251"
166895	Female/Female	1.000"	.625"	.250"	.251"

Part			Overall	Pricing		
Number	Metal [†]	Fig	Length	1	10	100
166908	Brass ²	4	.500"	\$.65	\$.55	\$.45
143520	Brass ²	5	.750"	.89	.69	.59
166895	Brass ²	5	1.000"	.69	.59	.49

.187 Hex Threaded Male/Female Standoff 4-40 x .187" Jack Screws and Hex Nut

187"	- L		187"	.2.4	.240			
169931/1028	16/172603	10898		102795				
Part No.	Description	1	10	100	1000			
169931	.275"L ja	.275"L jack screws			\$.12	\$.09		
172603	.315"L ja	ck screws	*	.13	.09	.05		
102816	.435"L ja	ck screws	*	.17	.13	.10		
108986	.515"L ja	.515"L jack screws			.14	.11		
175636	.187"L he	.187"L hex nuts			.12	.06		
102795*	.240"L he	ex nuts	*	.17	.12	.06		

.250" Hex Threaded Male/Female Standoffs **4-40 Thread (Fig. 3)** (Thread A: 0.250"; B: 0.187")

Part		Hex	Pricing			
Number	Metal [†]	Length	1	10	100	1000
77585	Alum ¹	.250"	*	\$.25	\$.19	\$.15
77593	Alum ¹	.375"	*	.25	.19	.15
111755	Alum ¹	.500"	*	.27	.22	.17
175628	Steel ³	.580"	*	.19	.15	.12
139213	Alum ¹	.625"	*	.29	.25	.19
139221	Alum ¹	.750"	*	.29	.25	.17
139230	Alum ¹	1.000"	.39	.32	.25	.19
128565	Alum ¹	1.234"	.45	.39	.29	.25
166545	Alum ¹	1.500"	.59	.49	.39	.35

.250" Hex Threaded Male/Female Standoffs 6-32 Thread (Fig. 3) (Thread A: 0.375"; B: 0.250")

Part		Hex	Pricing			
Number	Metal [†]	Length	1	10	100	1000
133541	Alum¹	.250"	*	\$.25	\$.19	\$.15
133567	Alum ¹	.375"	*	.25	.19	.15
77606	Alum ¹	.500"	*	.27	.22	.17
77622	Alum ¹	.750"	*	.27	.22	.17
77649	Alum ¹	1.000"	*	.29	.25	.19

.250" Hex Threaded Male/Female Standoffs 8-32 Thread (Fig. 3) (Thread A: 0.437"; B: .375")

Part		Hex	Pricing			
Number	Metal [†]	Length	1	10	100	1000
143511	Alum ¹	.500"	*	\$.32	\$.25	\$.19

External Threaded Handle

1/4" Round / 90° Freefall

- Aluminum
- · Black anodized
- 90° free fall
- Requires (2) ¼" 28 nuts
- Size: 0.25" Dia. x 3.0"L x 1.46"H
- Weight: 0.04 lbs.

	Part No.	Description 1	10	100
]	180638	Threaded handle\$7.95	\$6.95	\$6.25

SAE and Metric Hardware

- · Zinc-plated steel
- † With star washer









Slotted Pan Head Machine Screws					
Part	Screw	Thread	Length	100 p	cs. min.
Number	Size	inread	(inches)	100	1000
38172	2-56	Std	.25	\$.036	\$.024
40951	4-40	Std	.25	.016	.012
40969	4-40	Std	.375	.016	.012
106809	4-40	Std	.50	.016	.012
171942†	M3	Fine	6mm	.01	.006
106542	6-32	Std	.25	.02	.013
42446	6-32	Std	.375	.024	.016
42438	6-32	Std	.50	.03	.018
143634	8-32	Std	.25	.012	.009
106817	8-32	Std	.375	.04	.024
106796	8-32	Std	.50	.04	.024

0		Hex Nuts				
38164	2-56	Std	.183	\$.03	\$.018	
40942	4-40	Std	.243	.016	.012	
172620	M3	Fine	6mm	.01	.006	
42420	6-32	Std	.306	.02	.013	
51553	8-32	Std	.334	.03	.018	

		9		
106825	4	.281	\$.024	\$.016
106833	6	.373	.03	.018
106841	8	.377	.03	.018

0	Interr	Internal Tooth Lock Washers				
106850	4	.258	\$.016	\$.012		
106868	6	.277	.024	.016		
106876	8	.323	.024	.016		

C	:	Split Lock Washers				
106788	2	.161	\$.03	\$.018		
40977	4	.205	.016	.012		
42462	6	.240	.024	.016		
51609	8	.279	.03	.018		

PCB Standoff Mounting Hardware









Snap "on"
 Nylon

28337: 1.2"L x 0.6"W for 0.2" holes 129251: 0.9"L x 0.4"Dia. for 0.2"/0.3" holes **148056**: 0.8"L x 0.5"W for 0.1"/0.2" holes

156849: 0.5"L x 0.35"Dia. for 0.187" holes 156831: 0.68"L x 0.32"Dia for 0.140" holes

156831

* Prepackaged: please order in increments of 10, 100 or 1000 Part No. Product No. 10 1000 PCST \$.15 28337 * \$.07 \$.04 **129251** PCST2 .15 .11 .07 **148056** PCST3 .08 .13 .03 **156849** KCS5 .15 .10 .06 **156831** KCS10 .09 .05

Snap Rivet Set

- Rivet post pressure expands legs for fast and permanent fastening
- Spreader Material: nylon 66, 94V-2 Size: (rivet) 0.3"L; (spreaders): 0.25" x 0.117" Dia.
- *Prepackaged: please order in increments of 10, 100 or 1000 Part No. Description 10 100 1000 157374 Snap rivet set* \$.06





KAE Industrial Motion Controllers for Brush, Brushless and Stepper Motors

All controllers include integrated power amplifiers. Up to 32 controllers can be daisy-chained from a single full-duplex RS485 port. See below for RS232 to RS485 adapter. Complete documentation, test and example software, and technical support is available from the J.R. Kerr Automation Engineering web site: www.jrkerr.com

184989: PIC-SERVO Motor Control Board

- For brush-type DC motors with 2 or 3 channel incremental encoders
- P.I.D. Servo control, trapezoidal position profiling, velocity mode, 32 bit resolution
- Integrated power amplifier 3 amp cont., 6 amp peak 12 to 48vdc supply
- · Limit switch inputs, general purpose analog input, PWM, Dir. output for use with external amps

184997: PIC-STEP Motor Control Board

- Integrated indexer and driver for 2 or 4 phase stepper motors
- Full/half step bipolar chopper drive 2 amps per phase, 7.5 to 46vdc supply
- Trapezoidal position profiling, velocity mode, up to 50,000 steps per second
- · Limit switch inputs, general purpose outputs, step/dir outputs for use with external drivers

185009: PIC-SERVO 3PH Motor Control Board for Brush or Brushless Motors

- · For 3-phase brushless motors (with hall effect sensors) or conventional DC brush-type motors
- High current amplifier: 7 ams cont., 10 amps peak 12 to 48VDC supply
- Same features as 184989 above but with support for linear and circular interpolation using the PIC-SERVO CMC chipset

184962: PIC-I/O Multifunction I/O Control Board

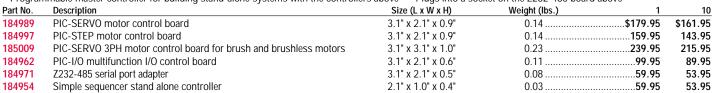
- 12 I/O bits software configurable as inputs or outputs
- Three 8-bit analog inputs, two PWM outputs with high current drivers One counter input

184971: Z232-485 serial port adapter

Lets you operate the controllers above from any standard RS232 port

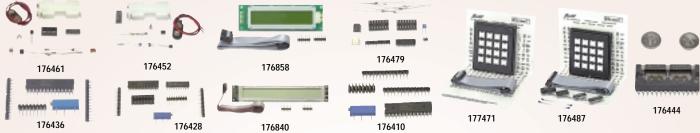
184954: Simple Sequencer stand-alone controller

Programmable master controller for building stand-alone systems with the controllers above
 Plugs into a socket on the Z232-485 board above



Control Technology Programmable Controllers

Self-contained development/debug system: easy to write and debug code on controller. Controller uses a PC computer serial port and communication program (supplied). Two RS-232 serial ports with data buffers and DB-9 connectors. Four external interrupts for instant response with commands for service routines EPROM or Flash memory programmable on-board for non-volatile code storage with AutoStart.



ViTRAX Plus Controller

176399

176858: LCD 2x24

- Optimized interpreter
- · 80 commands
- · 24 digital I/O lines
- Serial ports to 19.2K baud
- EPROM programmer and commands
- Power: +5VDC @ 200mA (recommend P/N 164101 below)
- Size: 4.5"L x 6.5"W

Optional modules: 176461: RT clock

1	76436:	A/D: 10-bit 8 ch.	176840: LCD 2x	(32
Р	art No.	Description	1	5
1	76399	ViTRAX controller	\$124.95	\$112.95
1	76461	RealTime clock	39.95	35.95
1	76436	Analog/digital conve	erter39.95	35.95
1	76858	LCD module 2x24	49.49	44.95
1	76840	LCD module 2x32	59.49	53.95
1	64101	Power supply (pg 8	8) 6.95	6.25
4	1970	Expansion memory	(pg 17)4.95	4.49

MultiTRAX Multitasking Controller

176381

- · Multitasking compiler
- · 106 commands
- · 48 digital I/O lines
- Serial ports to 38.4K baud
- **EPROM** programmer and commands
- Power: +5VDC @ 250mA
- Size: 5.5"L x 6.5"W

Optional modules:

176452: RT clock 176858: LCD 2x24 176428: A/D: 10-bit 8 ch. 176840: LCD 2x32

176487: 4x4 keypad Part No Description

i dit ivo.	Description	
176381	MultiTRAX controller\$239.95	\$219.95
176452	RealTime clock39.95	35.95
176428	Analog/digital converter39.95	35.95
176487	Keypad 4x459.95	53.95
176479	Pulse/event/freq. counter 49.95	44.95
176858	LCD module 2x24 49.49	44.95
176840	LCD module 2x32 59.49	53.95
164101	Power supply (pg 88)6.95	6.25
41970	Expansion memory (pg 17) 4.95	4.49

FlashTRAX Controller

Tokenized interpreter

184989

185009

184971

184997

184962

184954

- 115 commands
- · 24 digital I/O lines
- Serial ports to 19.2K baud
- FLASH programmer and commands
- Power: +5VDC @ 125mA
- · Size: 4.3"L x 5.9"W

Optional modules: 176444: RT clock

176410: A/D: 10-bit 8 ch.

176858: LCD 2x24 177471: 4x4 keypad 176840: LCD 2x32

5	Part No.	Description 1	5
5	176372	FlashTRAX controller \$169.95	\$152.95
5	176444	RealTime clock w/ batteries 49.95	44.95
5	176410	Analog/digital converter39.95	35.95
5	177471	Keypad 4x4 59.95	53.95
5	176858	LCD module 2x24 49.49	44.95
5	176840	LCD module 2x32 59.49	53.95
5	164101	Power supply (pg 88)6.95	6.25
9	41970	Expansion memory (pg 17)4.95	4.49

For more information and specifications visit www.controlTrax.com





176372

24VAC/VDC Motor With Gearbox

Synchronous / Bipolar Stepper

 Power requirements: 24VAC@50/60Hz (for synchronous motor operation)/24VDC (for stepper motor operation)



- 20 rpm (as synchronous motor)
- 0.5 degree step angle (as stepper motor)
- Size: (motor) 1.86"Dia. x 1.0"L

• Size: (gearbox) 2.1"Dia x 0.7"L • Weight: 0.8 lbs.

 Part No.
 Description
 1
 10
 50

 176364
 Motor w/ gearbox...\$22.95
 \$19.95
 \$17.95

TimeTech 120VAC Gear Motor

4.8 rpm - 3.5 Watt

- Operating voltage: 120VAC @ 60Hz
- No load current: 25mA
- 4.8 revolutions per minute
- Terminals: 0.19
- · Screw down tabs for mounting
- Shaft diameter: 0.27" Shaft length: 0.32"

 Part No.
 Product No.
 Description
 1
 10
 50

 160987
 \$430
 Gear motor...\$3.95
 \$3.49
 \$2.49

JAMECO 1.3VDC Vibrating Motor

- Typical applications: cellular phones, pagers, and toys
- Operating voltage: 1.3VDC@62mA
- Operating voltage range: 0.7VDC ~ 1.6VDC (max.)
- Rated RPM: 7000rpm@1.3VDC
- Stall current: 112mA@1.3VDC Lead length: 0.7
- Size: (motor) 0.67"L x 0.28"Diameter
- Size: (shaft) 0.18"L x 0.10" Diameter

 Part No.
 Description
 1
 10
 100

 175062
 Vibrating motor......\$3.95
 \$3.49
 \$2.95

JAMECO 1.3VDC Vibrating Motor

- Typical applications: cellular phones, pagers, and toys
- · Operating voltage: 1.3V@65mA (typical)
- Rated RPM: 8500@1.3VDC
- · Direction of rotation: clock wise
- · Lead length: 0.75"
- Size: (motor) 0.55"L x 0.16"diameter
- Size: (shaft) 0.23"L x 0.15"diameter

 Part No.
 Description
 1
 10
 100

 175396
 Vibrating motor.......\$5.95
 \$5.35
 \$4.79

JAMECO 8VDC Vibrating Motor

- Typical applications: beepers, small toys, cellular phones
- Operating voltage: 8VDC @ 45mA
- Operating voltage range: 2.5VDC 8.8VDC (max.)
- · Starting current @ operating voltage: 60mA or less
- Rated RPM: 4500 or more @ 8VDC
- · Direction of rotation: CW / CCW
- Size: 0.55"Dia. x 0.13"Thick

Part No.	Description 1	10	100
185228	Vibrating motor\$2.95	\$2.65	\$2.35

JAMECO 6VDC Air Pump

- RPM (motor): 5000rpm
- Power requirements: 6VDC@125mA
- Max air pressure: 1 psi
- Tube size:0.33" outside diameter
- · Inlet tube: 1.99" outside diameter
- · Outlet tube: 0.246" outside diameter
- Size: (motor) 1.0"Dia x 1.3"L Weight: 0.2 lbs.

Part No.	Description	1	10	50
176321	Air pump	\$14.95	\$13.49	\$11.95

JAMECO 110VAC Air Pump

- Input voltage: 110VAC @ 50Hz
- Input wattage: 9 watts
- Normal pressure: 1.42psi
- Air flow (L/min): 8
 Naisa laval 27:18
- Noise level: 27dB
- Closed pressure: 2.6psi
- Size: 5.7"L x 5.0"W x 3.4"H Weight: 5.6 lbs.

Part No.	Product No.	1	10	50
177543	DB8L\$	69.95	\$62.95	\$56.95

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Servo and Stepper Motor Controllers

Multi Stepper Motor Control Board

- Simultaneous/independent control of up to 16 stepper motors through a single serial port
- 24-bit position register, can be read while motor is moving
- Linear acceleration/ deceleration capability, up to 8500 step/sec.
- Full step (monophasic and biphasic), half step and external driver modes
- Current mode driver, drives coils up to 2A/45V
- Automatic power down prevents motor overheating

Shown w/ motors

- External driver control outputs: step, direction
- and power control26 digital I/O and two SPI interfaces for control
- of external devices

 32 bits DDL interface for Windows® 9X, NT & Linux
- Internal FIFO RAM (128 bytes) allows customized motion profiles
- High speed serial communication interface 9600-230400 baud
 11 analog channels, AD converter 10 or 12 bits resolution
- Size: 7.7"L x 5.0"W x 1.0"H Weight: 0.7 lbs.

 Part No.
 Description
 1
 5

 168727
 Stepper motor control brd...\$389.95
 \$369.95

Motor Controller

One Axis

- Controls one bipolar stepper motor with 32-bit absolute position
- Interface to PC through
 RS232 or RS485 @ 2400-19
- RS232 or RS485 @ 2400-19200 bps
 Multiple boards may share same serial line
- (RS485 only) Addressable up to 255 boards
 2 channel general purpose 8-bit A/D input port for reading 0 to 5V 4-bit digital input for home limits
- · Full, half or wave step modes
- · Includes user's manual and sample code software
- Size: 4.4"L x 2.3"H Weight: 0.7 lbs.

 Part No.
 Description
 1

 153621
 32-bit controller......\$159.95
 \$149.

Scott Edwards Mini SSC II Module (Serial Servo Controller)

- Controls 8 pulseproportional servos
- Receives serially at 2400 or 9600 baud
- Module is addressable thus allowing two units to share the same line to control a total of 16 servos
- Connections to serial input can be established using a modular jack (P/N 115553) or modular adapter from DE9 to RJ11 (P/N 114737) – pg 173
- Size (PCB): 1.9"L x 1.4"W
- Weight: 0.08 lbs. One year warranty

 5
 Part No.
 Description
 1
 5

 \$149.95
 151001
 Serial servo controller module \$49.95
 \$42.95

PONTECT Servo Motor Controller Board (8K EEPROM)

- Controls 1 to 8 servos per board, 8-bit precision Power supply: 4.8V to 6.0V
- Servo port can be reconfigured for digital output to drive on/off devices
- Interface to PC through RS232 port @ 2400-19200 bps
- Multiple boards may share same serial line
- 5 channel, 8-bit A/D input port for reading 0 to 5V
- · IR-receiver and transmitter feature
- Source/sink: 25mA per pin 8K EEPROM
- ncludes user's manual, supplement and sample code software

• Size: 1.7"L x 1.4"W (main board); 1.1"L x 0.9"W (infrared board) • Weight: 0.5 lbs.

 Part No.
 Description
 1
 5

 153648
 Servo motor controller board
 \$84.95
 \$79.95









24VDC Continuous Tubular **Pull Solenoids**

- · Holding force: 3 lbs.
- · Typical coil resistance: 131 Ω
- · Power: 8 watts
- · 2" lead wires

· Size: 3.1"L x 1.0"Dia.

· Weight: 0.4 lbs.

Part No.	Description 1	10	50
128557	24VDC solenoid \$3.49	\$2.95	\$2.49

We've color coded our items just for you!



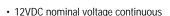
47010 74LS192* 16

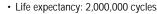
New Products Introduced in Our Catalog Items marked in red

Limited Quantitites Available Items marked in blue

Part	Product
Number	Number
163635	Number DC2405F11
174861	DCR2405F12
174879	DCB2405E52

12VDC Continuous **Tubular Push/Pull Solenoids**











145314

142463

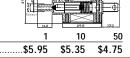
149761

		Coil Res.	Power	Holding Force		Size (ins.)	Shaft	Wt.			
Part No.	Туре	(±10%)	Consum.	(lbs. @ 20°C)	Wires (in.)	(L x Dia.)	Dia. (in.)	(lbs.)	1	10	50
145314	Push/pull	89Ω	2.0W	1.12	3.5	1.24 x .73	0.110	0.05	\$7.95	\$6.95	\$6.25
142463	Pull	36Ω	4.0W	0.63	2.0	1.63 x .43	0.150	0.04	4.95	4.49	3.95
149753	Push	36Ω	4.0W	0.75	7.0	1.90 x .50	0.063	0.05	7.95	6.95	6.25
149761	Push	20.7Ω	7.0W	1.50	7.0	2.50 x .60	0.098	0.10	8.95	7.95	6.95

JAMECO 12VDC Solenoid Valve

- · Operating voltage: 12VDC
- · Current: 350mA
- Air leakage: 1c.c./min. max. 4psi
- Operational temperature: -29°C to 85°C
- 0.250" quick
- disconnect terminals
- · Size: 1.2"L x 0.92"Dia.
- · Weight: 0.2 lbs.

Part No. Description 169834 Solenoid valve



GUARDIAN 12VDC **Continuous Push Solenoid**

- Typical coil resistance: 42.8Ω
- Pushing force: 0.75 lbs.
- · Terminals: 9.0" lead wires with male crimp pins
- · Power: 3.4 watts
- Size: 2.0"L x 0.6"Dia.
 Weight: 0.1 lbs.

Part No.	Description	1	10	50
163803	12VDC solenoid\$3.9	5	\$3.49	\$2.75

IVIotors

GBM Bipolar and Unipolar Stepper Motors

NEMA Size 10, 17 and 22

- · Bearing type: ball
 - Dielectric strength: 500V 50Hz/minute
- 173083/173091: 14" lead wires · 18" lead wires

- - NEMA 10 (173083)



GBM is an ISO-9001 Certified Company

Bipolar (Fig. 1) Unipolar (Fig. 2)

NEMA 17 (155459) NEMA 22 (162026)

• Ambient temperature: -10°C to +55°C P/N 155459 is dual shaft • Insulation resistance: $100M\Omega$ @ 500VDC· Use P/N 161998 (pg 79) for shaft coupler

Part	Product		Step	No. of	Drive	Voltage	Phase resistance	Current	Phase Inductance	Detent torque	Holding torque	Mounting hole space	Mounting hole	Shaft diameter	Shaft length	Motor diameter	Motor height	Weight		Pricing	
Number		Fig.		phases		(VDC)	(Ohms)	(mA)	(mH)	(g-cm)	(g-cm)	diagonal (in.)		(in.)	(in.)	(in.)	(in.)	(lbs.)	1	10	50
											NEMA 1	0									
173083	25BY2406	2	15	4	Unipolar	12	30Ω	400	7.5	48	120	1.3	0.13	0.08	0.36	1.0	0.5	0.1	\$6.95	\$5.95	\$5.25
173091	25BY4803	2	7.5	4	Unipolar	12	50Ω	240	16	45	170	1.3	0.13	0.08	0.25	1.0	0.5	0.1	8.95	6.95	5.95
	NEMA 17																				
155459	42BYG023	1	1.8°	2	Bipolar	12	30	400	36	220	2100	1.73	0.1	0.197	0.6	1.7	1.3	0.5	\$14.95	\$13.49	\$10.95
172558	42BYG014	2	1.8°	4	Unipolar	8.4	19	450	13	<200	1350	1.73	0.1	0.197	0.9	1.7	1.2	0.4	13.49	11.95	10.95
172646	42BYG205	2	1.8°	4	Unipolar	9.6	75	480	15	<220	2300	1.73	0.1	0.197	0.9	1.7	1.4	0.5	13.95	12.49	10.95
155432	42BYG228	2	1.8°	4	Unipolar	12	30	400	23	220	2000	1.73	0.1	0.197	0.9	1.7	1.5	0.5	14.95	13.49	11.95
											NEMA 2	2									
162034	57BYG085	1	1.8°	2	Bipolar	12	32	380	62	34	360	2.63	0.2	0.250	0.8	2.2	1.4	0.8	\$19.95	\$17.95	\$15.95
172531	57BYG061	2	1.8°	4	Unipolar	2.25	1.0	2250	2	7.1	58.8	2.65	0.2	0.250	1.2	2.3	2.0	1.4	20.95	18.95	17.49
172523	57BYG071	2	1.8°	4	Unipolar	3.5	1.4	2.5	2.0	9.8	88.2	2.63	0.2	0.250	0.8	2.3	2.8	2.0	29.95	26.95	23.95
172540	57BYG059	2	1.8°	4	Unipolar	4	2.5	1600	3.5	7.1	58.8	2.65	0.2	0.250	1.2	2.2	2.8	1.3	20.95	18.95	17.49
162026	57BYG084	2	1.8°	4	Unipolar	12	20	600	22	72	600	2.65	0.2	0.250	1.0	2.2	2.0	1.3	24.95	20.95	18.95

GBM 12VDC Unipolar 0.9°/ Step Geared Stepper Motor

· Voltage: 12VDC

- Coil resistance: 200Ω
- · Current: 60mA
- Ratio: 1/40
- 7.5°/ step stepper motor
- · Holding torque: 400 g-cm
- Detent torque: 400 g-cm Mounting space: 1.55"
- Shaft size: 0.316"L x 0.197"Dia.
 Mounting hole: 0.16"
- Motor size: 1.18"Dia. x 0.675"H · Weight: 0.1 lbs. Part No. Product No. 10 50 **173180** 30BYJ02AH.....\$9.95 \$8.95 \$7.95

Seiko Epson 7.2VDC **Unipolar Stepper Motor**

7.5° / Step

- · No. of phases: 4
- Coil resistance: 30Ω
- Voltage: 7.2VDC
- Current: 550mA
- Phase inductance: 10mH Detent torque: 90 g-cm • Holding torque: 750 g-cm
- Shaft size: 2.53"L x .08"Dia.
- Mounting hole space: 1.67" Mounting hole dia.: .100"
- · Weight: 0.2 lbs. Motor size: 1.38"Dia. x 0.5"H Part No. Product No. 10 50 780387 **\$3.49**

12V Unipolar تشتلك **Linear Stepper Motor** .003" / Step

- Operating voltage: 12VDC
- 325 steps maximum both directions
- Distance travel / step: .003"
- 11" lead wires
- · Shaft size: contracted .077"Dia. x 0.14"L extended .077"Dia. x 1.09"L
- Motor size: 1.86"Dia. x 0.92"L
- · Shaft travel: 0.95" total · Weight: 0.4 lbs.
- Part No. Product No. 10 162587 A92218M \$6.95 \$6.25



Bipolar and Unipolar Stepper Motors

- Excellent for precision control
- · Excellent torque/size ratio
- · Can be operated in forward/reverse mode
- · 163395/163408: Dual shaft
- 171601: Dual shaft w/ 10 tooth Wide variety of supply voltages
- P/N 25216 (IC, MC3479P pg 11) biphase stepper motor driver can be used to operate P/N 105881 stepper motor
- See pages 92-99 for compatible power supplies
- P/N 105881/105873/105890; use P/N 161998 for shaft coupler (see page 79)



130112

(Fig. 1)

168840 (Fig. 2)





163395





105881 (Fig. 6)



NMB NPM



151861

169703

(Fig. 5)



169201 (Fig. 9)

• P/N 1	05881/1058	373/	10589	90; us	e P/N 16	1998 f	or shaft	couple	r (see pag	ge 79)		V	Prod	ucts	(Fi	ig. 7)		(Fig. 8)		Fig. 9)	
Part	Product		Step	No. of	Drive				Phase Inductance		Holding torque	Mounting hole space		Shaft diameter	Shaft length	Motor diameter	Motor height	Weight		Pricing	T
Number	Number	Fig.	Angle	phases	System	(VDC)	(Ohms)	(mA)	(mH)	(g-cm)	(g-cm)	diagonal (in.)	(in.)	(in.)	(in.)	(in.)	(in.)	(lbs.)	1	10	50
130112	23LQC202	1	5.0°	2	Bipolar	1.9	3	750	5	35	280	1.77	0.19	0.250	1.48	2.22	1.65	0.82	\$2.95	\$2.49	\$1.95
174668	23LMC32908	1	1.8°	2	Bipolar	2.7	2	2000	3.5	360	4500	2.45	0.13	0.234	0.85	2.23	1.88	1.05	3.95	3.49	2.95
168840	5015-838	2	1.8°	2	Bipolar	4.3	3.4	1200	4.6	144	1800	1.74	0.10	0.196	0.64	1.50	1.56	0.50	9.95	8.95	7.25
117954	LB82773-M1	3	7.5°	2	Bipolar	5	6.25	800	7	100	1080	2.60	1.95	0.250	0.75	2.25	1.00	0.60	3.49	2.95	2.49
163395	5017-935	4	0.9°	2	Bipolar	8.4	30	280	25	36	791	1.73	0.15	0.155	0.29	1.64	1.20	0.53	3.95	3.49	2.95
163408	4017-806	4	1.8°	2	Bipolar	9.2	38	240	52	36	664	1.73	0.15	0.155	0.23	1.66	1.25	0.55	3.95	3.49	2.95
168831	SM200050HL	5	1.8°	2	Bipolar	12	9.7	1000	18	85	625	1.72	0.10	0.196	1.18	1.50	1.66	0.70	7.95	6.95	5.49
105881	SM4203	6	3.6°	2	Bipolar	12	25	480	31	80	600	1.73	0.11	0.197	0.43	1.66	1.31	0.51	4.95	4.49	3.95
151861	C42M048A04	7	7.5°	4	Unipolar	5	9.1	550	10	90	750	1.94	0.13	0.117	0.40	1.65	0.83	0.29	4.49	3.95	2.95
164056	M82101-P1	3	7.5°	3	Unipolar	5	20	255	5.3	20	18	1.4	0.13	0.078	0.35	1.00	0.46	0.08	4.49	3.95	2.95
171601	PF35T48L4	3	3.6°	4	Unipolar	7	20	350	8.56	40	680	1.68	0.14	0.078	0.47	1.38	0.58	0.14	3.49	2.95	2.49
169703	PF35T48H1	8	7.5°	4	Unipolar	7	50	550	10	90	750	1.66	0.10	0.080	0.25	1.37	0.51	0.20	3.95	2.49	2.15
105873	SM4202	6	3.6°	4	Unipolar	12	75	150	43	80	504	1.73	0.11	0.197	0.43	1.66	1.32	0.53	5.95	5.49	4.95
105890	SM4200	6	3.6°	4	Unipolar	12	75	150	39	80	600	1.73	0.11	0.197	0.43	1.66	1.28	0.55	5.95	5.49	4.95
166705	PM42S-096	3	3.8°	4	Unipolar	12	84	140	16	60	450	1.95	0.13	0.117	0.40	1.66	1.64	0.18	3.95	3.49	2.95
172232	PF4248E189	3	5.0°	4	Unipolar	12	50	240	36	80	700	1.96	0.13	0.117	0.40	1.66	0.85	0.28	4.95	4.49	3.95
172241	PF4248E188	3	5.5°	4	Unipolar	12	50	240	33	40	750	1.97	0.13	0.117	0.40	1.66	0.85	0.30	3.95	3.49	2.95
172259	PF4248E186	3	5.8°	4	Unipolar	12	50	240	38	85	700	1.97	0.13	0.117	0.39	1.65	0.85	0.29	4.95	4.49	3.95
169201	STP57D317	9	1.8°	4	Unipolar	24	81	160	68	80	600	2.65	0.18	0.250	0.75	2.20	2.10	1.40	8.95	7.95	6.95

NMB Bipolar and Unipolar Stepper Motors







174617







P/N 174617: w/ 27 tooth gear P/N 174570: w/ 15 tooth gear and fly wheel (1.12"Dia. x .107"T)

P/N 174561: w/ 15 tooth gear and detachable bracket w/1:1:35 reduction gear

Part	Product	Step	No. of	Drive	Voltage	Phase resistance	Current	Detent torque	Holding torque	Mounting hole space	Mounting hole	Shaft diameter	Shaft length	Motor diameter	Motor height	Weight	Pricing			
Number	Number	Angle	phases	System	(VDC)	(Ohms)	(mA)	(g-cm)	(g-cm)	diagonal (in.)		(in.)	(in.)	(in.)	(in.)	(lbs.)	1	10	50	
175775	23LMC32903V	3.6	2	Bipolar	3.6	1.5Ω	2400	400	5000	2.65	0.194	0.250	0.748	2.23	1.74	1.61	\$8.95	\$7.95	\$6.95	
174588	23LMK25502	1.8	2	Bipolar	6.5	40Ω	350	50	1000	2.65	0.197	0.250	0.948	2.23	1.64	0.83	5.95	5.49	4.95	
174617	23LMC352G2	1.8	4	Unipolar	3.9	30Ω	130	26	520	2.64	0.123	0.250	0.742	2.23	1.81	1.10	5.95	5.49	4.95	
174570	PM35L048HPM2	7.5	4	Unipolar	12	100Ω	120	60	1200	1.69	0.123	0.118	0.239	1.38	0.77	0.21	4.95	4.49	3.95	
174553	PM55L048NBC7	7.5	4	Unipolar	12	20Ω	600	320	6400	2.58	0.09	0.157	0.340	2.20	0.85	0.58	4.95	4.49	3.95	
174561	PM55L048XR04	7.5	4	Unipolar	24	10Ω	2400	960	15000	2.59	0.131	0.157	0.303	2.20	0.85	0.66	5.95	4.95	4.49	

star motor 3VDC Miniature Motors

- Reversible Oil-impregnated bearing
- Voltage range: 1.5 3VDC
- Terminal type: solder tabs · Shaft diameter: 0.078"
- Use P/N 161998 for shaft coupler (see page 79)

Part	Product	Current	Stall Torque	RPM	Shaft	Size	Weight		Pricing	
Number	Number	(mA)	(g-cm)	(max.)	Length (in.)	(Dia." x L")	(lbs.)	1	10	100
154915	ST-130-12240	70	24	5200	0.329	0.778 x 1.078	.047	\$.99	\$.79	\$.55
154923	ST-130-22770	240	42	16000	0.305	0.779 x 1.140	.041	.79	.65	.39
154982	ST-280-2865	220	130	9500	0.412	0.945 x 1.335	.094	.99	.59	.45







DC and Gear Head Motors 78

173681: • With eccentric gear

1.5-36VDC DC Motors

MITSUMI

NMB GBM







171598



171598: • Shaft pulley type with ten tooth configuration • Pulley size: .298"W x .38"D



Bronze bearings



150666/176567: • Shaft pulley type with 16 tooth configuration









166676



177498





168436

181411

153656		174991	181	112	174	692	162579		173673		181964		1736	81
Part	Product		Nominal	Voltage	Current		RPM	Shaft	Shaft		Weight		Pricing	
Number	Number	Manufacturer	Voltage	Range	(Amps)	Terminal Type	(max)	Dia.	Length	Size D" x L"	(lbs.)	1	10	100
166676	FA130RA2270	Mabuchi Motor	1.5VDC	1.5V-3V	0.200	.07"/solder	9100	0.08"	0.30"	1.00 x 0.80	0.30	\$.99	\$.79	\$.49
177498	RC280RA-2485	Mabuchi Motor	4.5VDC	3V-14V	0.150	11"/solder	10300	0.08"	0.43"	0.95 x 1.20	0.10	1.75	1.49	1.25
171598	FFO3OPN	Mabuchi Motor	4.7VDC	3V-14V	0.045	2" wires	9800	0.06"	0.23"	0.61 x 0.73	0.03	1.25	.99	.75
181411	HC685G-61810	Johnson Electric	5.0VDC	3V-14V	0.047	.187"/solder	10000	0.13"	0.54"	1.40 x 1.98	0.33	3.95	3.49	2.95
169447	36ZY50SH6530	GBM	7.2VDC	3V-12V	1.100	.11"/fast on	10700	0.13"	0.46"	1.40 x 2.25	0.50	4.49	3.95	3.49
169439	36ZY50SH7522	GBM	7.2VDC	3.6V-9.6V	1.600	.11"/fast on	14500	0.13"	0.44"	1.40 x 2.25	0.50	4.95	4.49	3.95
153656	RS550PF	Mabuchi Motor	7.2VDC	4V-10V	1.400	.15"/solder	6500	0.13"	0.66"	1.45 x 2.25	0.49	2.95	2.49	1.95
174991	6424CL09WB20	NMB	10VDC	8V-12V	0.430	8" wires	4100	0.12"	0.64"	1.62 x 0.64	0.20	1.75	1.49	1.25
169480	HC713-7315	Johnson Electric	12VDC	6V-13V	2.080	.186"/fast on	15900	0.21"	0.48"	1.64 x 2.15	0.70	2.49	1.95	1.49
169471	PC2001G	Johnson Electric	12VDC	5V-15V	0.016	.11"/fast on	2100	0.08"	0.72"	1.00 x 1.20	0.20	.75	.59	.45
181112	M25N-2	Mitsumi	12VDC	5V-15V	0.018	11"/solder	3000	0.08"	0.26"	0.97 x 1.30	0.11	1.25	.99	.75
174692	21226-384221	Johnson Electric	12VDC	9V-14V	0.015	.11"/solder	3000	0.08"	0.69"	.97 x 1.19	0.11	.99	.79	.79
162579	TID20E	Operating Tech T&I	12VDC	9V-14V	0.025	.20"/solder	2150	0.12"	0.48"	1.48 x 1.42	0.19	1.75	1.35	1.09
173673	HC315MG	Johnson Electric	12VDC	9V-14V	0.670	.11"/solder	4600	0.09"	0.50"	1.14 x 1.37	0.16	1.09	.89	.65
181964	NF203G12	Johnson Electric	12VDC	9V-14V	0.030	.07"/solder	5000	0.08"	0.57"	0.95 x 1.20	0.10	1.25	.99	.79
173681	HC610F	Johnson Electric	12VDC	9V-14V	0.220	.187"/fast on	6600	0.12"	0.92"	1.40 x 1.80	0.40	1.75	1.49	1.15
168436	1911520YSP	Soho	12VDC	9V-14V	0.650	.187"/solder	1860	0.13"	0.52"	1.58 x 2.37	0.67	2.95	2.49	1.95
170051	KC613L	Johnson Electric	13VDC	9V-15V	0.250	.25"/fast on	6200	0.12"	0.75"	1.40 x 2.00	0.50	1.95	1.75	1.49
150666	HC675LG	Johnson Electric	24VDC	9V-30V	0.390	10.5" wires	4100	0.12"	0.38"	1.47 x 2.25	0.48	1.09	.89	.59
176567	HC675LGS	Johnson Electric	24VDC	9V-30V	0.390	10.5" wires	4100	0.13"	0.35"	1.47 x 2.07	0.48	.95	.75	.49
166650	1635	Igarashi	36VDC	5V-50V	0.450	.187"/solder	6900	0.13"	0.67"	1.40 x 2.20	0.50	1.49	1.25	.75







176567



12/24VDC Reversible Gear Head Motors

Rated

Voltage

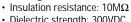
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3.0 - 12

- · Solder type terminal
- High torque construction
- · Oil bearing design for long service life

Part

Number



Product

Number

· Dielectric strength: 300VDC



Operating



Speed

5200

No Load



159417

Gear Size

(in.)



Motor Size

155011



Shaft Size

.78 x .34

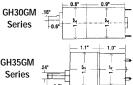
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\$4.49



Series

Wt.



25

Pricing

HN27GD Series Motor Size

Ratio

Started

Torque

167038	GH12-0953Y	12	4.5 – 24	45	14	1.2	188:1	1.0 x 0.9	1.1 x 0.8	.16 x .45	0.2	\$14.95	\$12.95	\$10.95	
167046	GH12-1828Y	12	4.5 – 24	95	37	1.3	90:1	1.2 x 1.3	1.1 x 0.8	.16 x .45	0.2	18.95	16.95	14.95	
174342	GH12-1825Y	12	6.0 – 24	65	97	.40	43:1	1.1 x 1.0	1.1 x 0.8	.16 x .45	0.2	17.95	15.95	13.95	
	GH30GM Series														
170641	GH12-1828Y-10	12	6.0 – 24	45	10	3.50	332:1	1.1 x 1.1	1.2 x 0.6	.16 x .60	0.3	\$19.95	\$17.95	\$15.95	
153437	GH12-1045Y	12	3.0 – 12	35	15	0.80	200:1	1.2 x 0.9	1.2 x 0.6	.16 x .60	0.1	14.95	13.49	11.95	
159417	GH12-1921Y	12	4.5 – 12	150	42	8	132:1	1.2 x 0.9	1.2 x 0.6	.16 x .60	0.3	17.95	14.49	12.95	
162190	GH12-1324Y225	12	4.5 – 12	65	225	0.70	30:1	1.2 x 0.9	1.2 x 0.6	.16 x .60	0.1	14.95	12.49	10.95	
	GH35GM Series														
155011	GH12-1926	12	4.5 – 12	55	2	15	3000:1	1.4 x 1.0	1.5 x 1.1	.24 x .70	0.3	\$19.95	\$17.95	\$14.95	
155820	GH12-1830Y-P	12	4.5 – 12	50	4.5	13	1000:1	1.4 x 1.0	1.5 x 1.1	.24 x .70	0.3	19.95	16.49	14.95	
155838	GH12-1641T-L	12	3.0 – 12	65	20	10	270:1	1.4 x 1.0	1.5 x 1.1	.24 x .70	0.3	19.95	16.49	14.49	
152910	GH12-1926Y	12	4.5 – 12	48	44	11.8	100:1	1.4 x 1.0	1.5 x 1.1	.24 x .70	0.4	19.95	17.95	15.95	
151440	GH12-1632TI	12	4.5 – 12	75	69	11	100:1	1.4 x 1.0	1.5 x 1.1	.24 x .70	0.3	19.95	16.49	14.49	
155854	GH12-1641T-F	12	3.0 – 12	65	87	7	60:1	1.4 x 1.0	1.5 x 1.1	.24 x .70	0.3	19.95	16.49	14.49	
155862	GH12-1926Y-F	12	4.5 – 12	60	100	5	60:1	1.4 x 1.0	1.5 x 1.1	.24 x .70	0.3	19.95	17.95	14.95	
161373	GH12-1345T	12	4.5 – 12	69	150	3	30:1	1.4 x 1.0	1.5 x 1.1	.24 x .70	0.3	19.95	16.49	14.49	
161381	GH12-1634T	12	4.5 – 12	111	200	3.6	30:1	1.4 x 1.0	1.5 x 1.1	.24 x .70	0.3	19.95	17.95	14.95	
164785	GH12-1640Y	12	4.5 – 24	45	300	.76	10:1	1.4 x 1.0	1.5 x 1.1	.24 x .70	0.3	19.95	17.95	14.95	
176049	GH12-1640Y00	24	12 – 24	140	2	6	3000:1	1.3 x 1.0	1.5 x 1.1	.24 x .70	0.4	18.95	16.95	15.49	
176031	GH24-1640Y06	24	12 – 24	140	65	2	90:1	1.3 x 1.0	1.4 x 0.7	.24 x .70	0.3	19.95	17.95	15.95	
176014	GH24-1640Y11	24	12 – 24	140	116	1.50	50:1	1.3 x 1.0	1.5 x 0.6	.24 x .70	0.3	18.95	16.95	15.49	
176022	GH24-1640Y19	24	12 – 24	140	193	1.0	30:1	1.3 x 1.0	1.5 x 0.7	.24 x .70	0.3	18.95	16.95	15.49	
					1	2VDC N	12VDC Motor (No Gear)								

155029

HN12-1641T

\$3.25

\$3.75

No gear

1.3 x 0.9

0.24

HS-303 Robotic Servo

Excellent power to weight ratio for robotic projects.

· Supply voltage: 4.8-6 volts

(For Motors)

1 set screw/hub

Hub OD: 0.625" Dia

· Hub weight: 0.02 lbs.

Part No. Description

(For Motors)

· Hub OD:

0.625" Dia.

106614/106606:

1 set screw/hub

· Hub length: 0.56"

· Weight: 0.02 lbs.

Part No. Description

• Hub length: 0.56"



• Speed: 16 sec. to 60°

· Can be operated by P/Ns 153648, 151001 (pg 75) and 157059 (right)

• Size: 0.8"W x 1.4"D x 1.6"H • Weight: 0.1 lbs.

Part No. Product No. Description

10 **157067** 14500 Robotic servo\$19.95 \$17.95 **JAMECO** Spider Couplers

• Parts sold individually 162288 (Coupler) 162000 (Spider)

Climax Spider Shaft Couplers

106614

106606

162288 .125" (3.18 mm) hub\$.99

161998 .197" (5.00 mm) hub99

162270 .250" (6.35 mm) hub99

138288: • 2 set screws (10-32 x 1/8)

• OD: 1/2" • Length: 0.75" • Wt.: 0.03 lbs.

106622 Rubber spider......**.75**



robotic fingers or pincers. Power supply voltage: 4.8-6 volts

Power: 38 oz/in.

Speed: 10 sec. to 60°

Can be operated by P/Ns 153648, 151001 (pg 75) and 157059 (right) • Size: 1.2"L x 0.48"W x 1.2"H Part No. Description

166369 Micro Robotic Servo......\$39.95

Giant Robotic Ball Bearing Servo

Extremely powerful! Perfect for large robotic projects where power is a must.

Power supply voltage: 4.8-6 volts

Power: 161 oz/in. Speed .19 sec. to 60°

Can be operated by P/Ns 153648, 151001 (pg 75) and 157059 (right)

Part No. Description 166351 Giant robotic servo\$49.95 \$44.95

Digital Proportional Radio Control System

75MHz • 1/4 mile range

- 2 channel proportional operation
- · HP-2RNB mini AM receiver
- · 2 HS-303 standard servos
- Requires 12 AA batteries
- Size: 6.0"L x 5.5"W x 2.0"H · Weight: 1.5 lbs.

Part No. Product No. Description \$69.95 **157059** 11007 Challenger 250...\$79.95

2.5" Robot **Drive Wheels**

- Extremely high traction foam rubber compound
- · For surface use only
- · Hubs (2): Set screw locking (1); Non-locking (1)

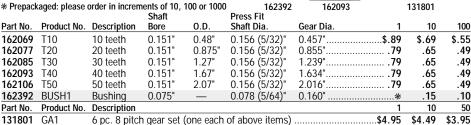
• Size: 2.5"Dia. x 2.0"W • Weight: 0.19 lbs. Part No. Product No. Description

157227 40035 Drive wheels (2)....\$29.95 \$26.95

8 Pitch Gears and 6 Piece Gear Set

- · Works with DC motors with 0.08" shaft diameter • Pitch: 0.125" Heavy-duty plastic construction
- Bore size: 0.154" Material: polyethylene resin • 162392: 0.15" bore to 0.070" bore

* Prepackaged: please order in increments of 10, 100 or 1000



157083

\$34.95

138288

\$.39 · Chemical resistance · Precision molded .69 .45 · Operates in high humidity and corrosive environments 39 .55 Chain links can easily be added or removed to 138288 250" sleeve coupler......3.95 3.49 2.95 adjust total length • Material: Dupont Delrin 500

163571

106622

10 100

Rubber

\$.59

.59

.59

.55

10

\$.79

.79

.79

Universal Joint Shaft Couplers Single Joint with 3mm Set Screws

Can be used to connect two shafts whose axis are misaligned. It can also be used where the angle varies during rotation.

· Material: mild steel · Set screws: 3mm (2) Size: 1.5"L x 0.5"Dia.

· Weight: 0.06 lbs. Part No. Description 10 **163678** 0.197" (5.00mm)\$8.95 \$7.95 163571 0.240" (6.00mm)8.95 7.95

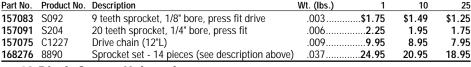
P/N 168276 · Sprocket set includes one each of the following: 8, 9, 10 teeth at 1/8" bore size; 12, 15, 16, 18, 20, 24, 30, 32, 36, 40 and 48 teeth at 1/4" bore size Part No. Product No. Description

16 Pitch Sprockets, Chain and

14 Piece Sprocket Set

 14 piece set Weight: 0.04 lbs. Wt. (lbs.) 10 25 .003.....\$1.75 \$1.49 \$1.25 .006.....**2.25** 1.95 1.75 .009.....**9.95** 8.95 7.95

157091



Robot Builder's Bonanza (2000)

TAB Publishing This fascinating guide offers you a complete, unique collection of tested and proven project modules that you can mix and match to create an almost endless variety of highly intelligent and workable robot creatures. (753 pages)



• Size: 7.3" x 9.2" • Weight: 1.2 lbs.

Part No.	Description	1	10
137171	Robot Builder's Bonanza	\$23.95	\$21.45

For additional robotic books see page 104

48 Pitch Gears, Hub and 12 Piece Gear Set

• Temperature range: -40°F to 180°F

· Chain tension load: 2.0 lbs.



• Temp. range: -40°F to 180°F

• Low coefficient of friction requires little or no lubrication

· Meets full depth involute tooth industry standards

Residual stress removed by annealing process Corrosion resistance • Precision molded

157147

157104

157155





157075

157075

P/N 168284 • Gear set includes one each of the following: 10 teeth at 3/2" bore size; 14 and 16 teeth at 1/4" bore size; 20, 24, 30, 36, 44, 54, 66, 84 and 100 teeth at ¼" bore size • 12 piece set • Weight: 0.06 lbs.

Part No.	Product No.	Description	Wt. (lbs.)	1	10	25
157147	GF484	48 teeth, 1/4" bore, press fit gear	.009	\$3.95	\$3.49	\$2.95
157155	GF1004	100 teeth, 1/4" bore, press fit gear	.019	4.95	4.49	3.95
157104	9999	1/4" bore aluminum mounting hub w/ set screws	.025	3.95	3.49	2.95
168284		Gear set - 12 pieces (see description above)			34.95	31.95





Laser Products, Circuit Breakers 80

153605

127749

C) ALPEC Laser Pointer Pens

- · Range up to 500 yards
- 670mm red laser
- · Power requirements: 2 AAA batteries (included)
- One-year warranty 153605:
- · Color: black
- Size: 5.2"L x 0.4"Dia.
- · Weight: 0.14 lbs.
- 127749: · Silver brass
- Size: 5.4"L x 0.4"Dia.
- Weight: 0.1 lbs

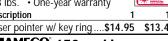
		(1)
Part No.	Description	10
153605	Laser pointer pen\$19.95	\$17.95
	Laser pointer – pen19.95	

DALPS Laser Pointer w/ Key Ring

- Range up to 150 yards
- 650mm red laser
- · Red arrow pointer
- · Operates on 2 LR44 (coin-cell) batteries (included)
- · Color: silver
- · Size: 2.1"L x 0.5"Dia.
- · Weight: 0.3 lbs. · One-year warranty

Part No. Description

Laser pointer w/ key ring\$14.95 \$13.49 153613



143853

167214

Class Illa Laser Product

143845

173243

JAMECO 650nm Line and Dot Lasers

- · APC power control
- · Focus adjustable w/ locking set screw
- · Current stable control
- · Wattage: 5mW
- Operating voltage: 3V-5V
- Female 2.1mm power connector center positive
- Size: 3.3"L x 0.9"Dia.
- · Weight: 0.2 lbs.
- · One-year warranty 167214: Dot (spot)

l	aser module						
	Distance	Dia. of Dot					
	5M	5mm					
	8M	9mm					

Distance	Dia. of Dot			
5M	5mm			
8M	9mm			
10M	13mm			
15M	20mm			
13815: Line laser modu				

143845: Line laser module

- · Laser line width: 1mm
- Laser fan angle: 60°

143853: Laser module mount Built to hold laser diode on target.

- X-Y tilt, θ movement
- · Weight: 0.5 lbs.
- · Tightening screw for tilt adjustment

173243: Cross hair laser diode module

- · Operating voltage: 3V-5V
- Wattage: 5mW · Laser fan angle: 60°
- Female 2.1mm power connector
- · Weight: 0.2 lbs. • Size: 3.0"L x 0.9"D

143837: Module regulated power supply

- Output: 5VDC @ 100mA Short circuit protection • Input voltage: 95-125VAC, or 190-250 VAC switchable
- Size: 2.0"W x 1.7"D x 9.2"H Weight: 0.6 lbs.

Part No.	Description 1	10
167214	Dot laser diode module\$99.95	\$89.95
143845	Line laser diode module 109.95	99.95
143853	Laser diode module mount49.95	39.95
173243	Cross hair laser diode mod84.95	74.95
143837	Regulated power supply14.95	12.95

Level with 650nm Laser Diode Magnetic and Tripod Mount



- · Line and dot lasers
- · Laser wavelength: 650nm
- · Skew is determined by built-in bubble
- Two magnets at the bottom of the unit for metal to magnet mounting
- · Threaded mounting hole at the bottom of unit for tripod mounting
- · Includes user manual, (2) AAA 1.5V batteries and hard plastic case
- Size: 5.4"L x 0.8"W x 1.4"H Weight: 0.9 lbs.

Part No.	Product No.	Type 1	10
169762	TI3284E	Line laser\$69.95	\$62.95
169771	TI3284D	Dot laser49.95	44.95

Circuit Breakers







· Magnetic circuit breakers

· 250 VAC: 50/60Hz

· Long delay

· UL, CSA approved

183476/183484: Single pole

• Size: 0.75"W x 2.5"H x 2.5"D · Weight: 0.2 lbs.

183492: Two pole

• Size: 1.50"W x 2.5"H x 2.5"D Weight: 0.5 lbs.

183505: Three pole

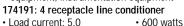
• Size: 2.25"W x 2.5"H x 2.5"D • Weight: 0.7 lbs.

Part No.	Product No.	Amps	1	10	50
183476	UPL1-1-62-103	10A	\$26.95	\$24.95	\$22.49
183484	UPL1-1-62-153	15A	26.95	24.95	22.49
183492	UPL11-1-62-203	20A	69.95	62.95	56.95
183505	UPL111-1-62-302	30A	109.95	99.95	89.95

Power Protection

BUSSMANN Line Conditioners

- Protects equipment from normal mode and common mode transients and noise
- Controls high frequency circulating ground currents
- Separately derived systems offering "ZERO" volts between neutral and ground conductors 174203
- Provides near "ZERO" noise at the electronic equipments signal reference
- Efficiency rate of 94% to 96%
- · Attenuates noise from 1KHz to 40MHz in the ground line while freely passing 60Hz virtually
- Designed for computer equipment, telecommunications equipment, instrumentation equipment



- · Load current: 5.0
- Size: 5.3"H x 6.0"W x 9.0"D Weight: 16.7 lbs. 174203: 4 receptacle line conditioner

174211

· Load current: 8.3 1000 watts

- Size: 6.0"H x 7.0"W x 11.0'D Weight: 27.5 lbs.
- 174211: 6 receptacle line conditioner

- · Load current: 16.0 · 2000 watts
- Size: 7.3"H x 8.3"W x 13.5"D Weight: 54.9 lbs.

Part No.	Product No.	1	
174191	IPS06005R \$74.9	5	\$64.95
174203	IPS01000R 89.9 !	5	79.95
174211	IPS02000R 179.9	5	161.95

Woods 6-Outlet Power Strip

- · Rugged plastic housing
 - -0-0-0-0-0-0 3-prong 4' power cord
- · Grounded outlet receptacles
- · 125V @ 15A built in circuit breaker
- · Lighted on/off switch · Color: beige • Size: 10.1"L x 1.5"W x 1.0"H · Weight: 1.0 lb.

Part No.	Product No.	Agency	1	10	100
172419	10728	UL/CUL.	\$4.95	\$4.49	\$3.95

ONEUPS Plus 300 Watt UPS System

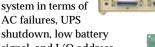
With Dual Outlet Input voltage:

- 120VAC @ 60Hz
- · Output voltage: 120VAC · Output current:
- 2.5 amps (full load) · Protects against blackouts and brownouts
- Battery charging: less than 6 hours to 90% usable capacity
- · Battery backup time: 5-10mins. @ full load; 10-20 mins. with partial load
- Size: 5.8"H x 3.4"W x 13.2"D
 Weight: 12.4 lbs.

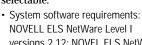
Part No.	Product No. 1	10
179961	PRB300A\$ 59.95	\$53.95

APC UPS Monitoring Kit

This card will monitor your UPS system in terms of AC failures, UPS



signal, and I/O address. All functions are switch selectable.



versions 2.12; NOVEL ELS NetWare Level II versions 2.12 and higher; NOVELL Advanced NetWare versions 2.1 and higher; NOVELL SFT NetWare versions 2.1 and higher; NOVELL NetWare 386 versions 3.0 and higher

- System hardware requirements: file server with AT style bus; APC UPS system equipped with an interface connector · Includes manual and cable
- · Weight: 0.6 lbs. · Size: 4.3"L x 3.9"W Part No. Description

1807

69	UPS monitoring kit	\$14.95
		00 70 Ct-1





Price

isobar® Surge Suppressors

(I)

139686

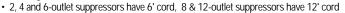
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The world's best known, most advanced surge suppressor provides total protection against surges, spikes and line noise.

• Diagnostic indicators on Ultra versions alert you to improper outlet wiring, loss of AC power, and damage to protection circuitry

Multi-component circuitry suppresses up to 120,000 amp spikes with up to 1,500 joules

- "Cascade Circuitry" allows you to chose increased noise protection level for your most sensitive equipment
- · UL 1449 and 1283 listed
- · IsoTel model has dual RJ11 jacks for complete modem/fax surge protection
- Lifetime warranty Heavy duty, all-metal housing; made in USA



· Up to \$50,000 Ultimate Lifetime Insurance covers Isobar and connected equipment against surge damage for life!



19001

	Isobar Premium Surge Suppressors							
Part No.	Product No.	Joules	Description	Wt. (lbs.) 1	10			
74456	ISOBAR 2-6	600	2 outlet, 1 isolated filters	1.8 \$39.9 5	\$34.95			
18981	ISOBAR 4	2200	4 outlet, 2 isolated filters	2.4 49.9 5	44.95			
74544	ISOBAR 6	2350	6 outlet, 3 isolated filters	2.7 49.9 5	44.95			
Isobar Ultra Premium Surge Suppressor								
136830	ISOBAR 4U	2200	4 outlet, 2 isolated filters	2.4 \$89.9 5	\$79.95			
148021	ISOBAR 6U	2350	6 outlet, 3 isolated filters	2.7 84.9 5	74.95			
19001	ISOBAR 8U	2350	8 outlet, 4 isolated filters	3.5 69.95	62.95			
	ls	otel AC	/Phone Line Surge Suppre	essor				
185113	ISOTEL 4U	2700	4 outlet, 2 isolated filters	2.7 \$69.9 5	\$64.95			
136848	ISOTEL 6U	2850	6 outlet, 3 isolated filters	3.0 79.9 5	71.95			
	I:	sobar Pr	remium 19" Surge Suppre	ssor				

Standard Surge Suppressors

12 outlet, 2 isolated filters 4.7 \$59.95 \$53.95

32045

Economical and effective spike and noise

139686 IBAR12RM

124337 suppression. • Super 7: \$25,000 Ultimate Life Insurance

• Super 8: \$35,000 Ultimate Life Insurance

• Super 7+ models include RJ11 jacks for complete dataline protection • Super 7 and Super 8 feature diagonostic LEDs

• P/N 168971: 15' power cord

Part No.	Product No.	Joules	Description	Wt. (lbs.) 1	10
168954	Super 6	450	Up to 27,000 amp spikes	1.2 \$11.95	\$9.95
124337	Super 7	1050	Up to 42,000 amp spikes	1.6 17.95	14.95
168962	Super 7+ Tel	1200	Up to 36,000 amp spikes	2.0 19.95	17.95
32045	Super 8	1200	Up to 54,500 amp spikes	1.7 29.95	26.95

Fax/Modem Protector

Protect change to communication lines

· Cable included from surges and spikes.

 Two-year manufacturer's warranty · Weight: 0.3 lbs.

Part No. Product No. Description 28601 PMP Modem/telephone protection



.\$13.95 \$12.49

Line Conditioners

These line conditioners keep you working through brownouts and overvoltages.

- · Automatically adjust incoming AC from 87 to 140 volts
- · Built-in surge suppression and noise filtering

· Up to \$25,000 Ultimate Lifetime Insurance for connected equipment Part No. Product No. Description Wt. (lbs.) Agency 4.5.....\$89.95 \$79.95 24619 LS600 600 watts, 2 outlets UL/CSA 22744 LC1200 1200 watts, 4 outlets

TRIPE LUTE BC Pro UPS Systems

- · Protect PC and workstations against blackouts, brownouts, surges, spikes and line noise
- 6 outlets and RJ11
- · Free PowerAlert software for unattended shutdown during blackouts
- Up to 75 minutes runtime

	Op to	, o minatos rai	TUITIO			
P	art No.	Product No.	Description	Agency	Wt. (lbs.)	1 10
1	24222	BCPRO600	600VA, 6 outlets	UL/CSA	15.1 \$189.9	5 \$174.95
1	85105	BCPRO1050	1050VA, 6 outlets	UL/CSA	35.0 429.9	5 379.95
1	24273	BCPRO1400	1400VA, 6 outlets	UL/CSA	41.5 568.9	5 518.95
_						

Internet Office UPS Systems

- · Protects your PC, fax/modem and all peripherals against all types of power problems
- · Automatic system shutdown with free PowerAlert software for 500VA and 700VA
- 6 outlets and RJ11 for fax/modem surge protection
- Up to \$25,000 Ultimate Lifetime Insurance for connected equipment • Up to 45 minutes runtime

Part No.	Product No.	Description	Agency	Wt. (lbs.)	1	10
185121	10280	280VA, 6 outlets	UL/CSA	4.5	.\$99.95	\$89.95
185130	10500	500VA, 6 outlets	UL/CSA	16.0	.134.95	124.95
185148	10700	700VA, 6 outlets	UL/CSA	20.0	.188.95	169.95

TRIPE LITE Smart USB UPS Systems

- Protect USB PCs
- · 6 outlets (3 surge and 3 UPS/surge) and RJ11 for fax/modem protection
- · Automatic shutdown with PowerAlert software
- · AVR corrects incoming voltage to 120 volts

	Part No.	Product No.	Description	Agency	Wt. (lbs.)	1	10
,	185156	500USB	500VA, 6 outlets	UL/CSA	15.5\$	179.95	\$161.95
	185164	700USB	700VA, 6 outlets	UL/CSA	17.5	.239.95	219.95

SL WABER" 19' Rack Mount 6-Outlet Power Strip

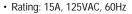


- · 1875 watts continuous duty
- Outlets: 30-duplexed "U" grounded
- 6' 14/3 SJT black molded plug
- · Circuit breaker protection
- · One-year warranty
- Size: front plate: 19.0"L x 1.7"W; back cover: 17.0"L x 1.7"W x 2.4"D;

mounting centers: 18.3"L x 1.3"W • Weight: 2.8 lbs. 10

134295.\$49.95 \$44.95 \$39.95 \$35.95

SL WABER" 4' Rack Mount 10-Outlet Power Strip



· Surge protection and EMI/RFI filtering



· Cord length: 6'

- Size: 4.0'L x 2.0"W x 1.5"H
- · Weight: 4.0 lbs.
- · Color: black

· One-year warranty Description

10-outlet power strip\$49.95



JAMECO & Zenith Power Strip **Surge Protectors**

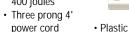
40 40 40 40 40 40

156857

20175

6-outlet 156857:

· Max. spike current: 18,000 amps, 400 ioules



 UL/CUL approved • Size: 10.3"L x 2.0"W x 1.5"H 20175: • Max. spike current: 4500 amps, 50 joules

- · Three-prong, 4' power cord · Metal
- Size: 12.3"L x 2.4"W x 1.3"H

Part No.	Description	Wt. (lbs.)	1	10	100
156857	Plastic pwr s	strip 1.0 \$6 .	95	\$6.25	\$5.59
20175	Metal pwr st	trip 1.5 8 .	95	7.95	6.95

Order Toll-Free 24-hours a day 7-days a week









185121

124222







PC Battery Eliminator

All IBM PC Compatibles

- · Eliminates clock battery (3-7.2V) on your system
- · Maintains SETUP configuration
- · Replaces all PC batteries
- Input: 12VDC @ typical 5mA, peak 50mA
- Output: 4-5VDC nom. @ 40μA
- Must be fully charged prior to use Wt.: 0.15 lbs.
- · One-year manufacturer's warranty

Part No.	Description 1	10
11172	Battery eliminator\$34.95	\$29.95

JAMECO Plastic Accessories

- · Solder tabs
- · Made of durable, black plastic
- · WLC wire lead with connector (computer clock backup)
- · Placement of cells: parallel (PC)
- · Battery type: 4 AA
- Term: 6" WLC • Size: 2.3"L x 2.5"W x 0.64"H

Part No.	Description 1	10	100	1000
105857	Plastic battery holder \$.89	\$.69	\$.59	\$.49

Cellular Phone Charger

Motorola Plug-in Charger

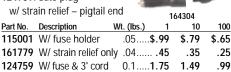
- · Charge your battery by plugging the saver into your cigarette lighter and phone
- · 6' coiled cord
- · Color: black
- · Weight: 0.3 lbs.

Part No.	For Models	1	10	25
122681	PT-500/5200/7200 \$6.9	5	\$5.95	\$4.95

Auto Power Plugs

- · Strain relief
- · Screw assembly
- · Plugs directly into cigarette lighter
- · Accepts .25" x 1.25" fuse (not included)

124759: auto plug



161779

Auto Power Plug Splitter

- · Input: cigarette adapter; non-fused
- · Splits out into two 5" female automobile type recepticles
- · Weight: 0.2 lbs.

Part No. Description Auto power plug splitter \$2.95 \$2.49 \$2.25 123182

Ceramic Cylinder Magnet

164304 W/ fuse (reversable) 0.4..... .99

Great for projects and experiments. .625"Dia. x .625"H.



.65

Magnets cannot be shipped by air.

Part No. Description 10 167100 Ceramic magnet.......\$.35 \$.29 \$.19 \$.15

We carry major manufacturers - call for additional OEM PRICING.

Ni-Cad Batteries

Nickel-Cadmium batteries are rechargeable, sealed cells.

- Can be used for cyclic, trickle or float charge use
- Recommend P/N 147598 battery charger (pg 114)
- · Weight: .04 lbs.
- IMPORTANT:

Batteries must be fully charged prior to use!



32627



119116



Batteries mast be raily smarged prior to deer						-		
Part No.	Product No.	Description	Voltage	Amps	1	10	25	100
32627	S3300	AA	1.2V	500mAh	\$1.95	\$1.75	\$1.49	\$1.25
126720	351FT	2-lead (pin)	3.6V	60mAh	3.95	3.49	2.95	2.49
119116	3/V60R	3-lead (pin)	3.6V	60mAh	3.95	3.49	2.95	2.49
101653	NA101-1	2-lead (eyelet)	3.6V	60mAh	4.95	4.49	3.75	3.25

Lithium, Silver Oxide, Zinc Chloride and Alkaline Batteries

Applications: personal computers, workstations, test equipment, feature telephones, copiers, fax machines, video scramblers/descramblers and remotes.



151087









33398

095	38543	33443
095	38343	33443

Part Number	Product Number	Description (V/Amps/Dia.)	Battery Type	Terminals/Connection	1	10	25	100
151087	AA	1.5V/0.7Ah/.545"	Zinc chloride	Barrel pressure fit (standard AA)	\$.39	\$.32	\$.25	\$.19
140783	357	1.55V/1.65Ah/.454"	Silver oxide	Button cell	1.59	1.35	1.19	.99
150965	840	4.5V/600mAh	Akaline	Battery pack w/ connector (Apple®)	8.95	7.95	6.95	5.49
126762	AA101-4	4.5V/2.2Ah	Akaline	Battery pack w/ plug (clock/memory)	5.95	5.49	4.49	3.95
11789	BR2325	3V/165mAh/.906"	Lithium	Coin cell (clock/memory)	1.95	1.75	1.49	1.25
14162	CR2032	3V/180mAh/.787"	Lithium	Coin cell (clock/memory)	1.39	1.15	.95	.75
33371	TL5101P	3.6V/.85Ah/.579"	Lithium	Barrel w/ leads (clock/memory)	5.95	5.49	4.95	4.49
126754	TL5101S★	3.6V/.85Ah/.579"	Lithium	Half AA (Macintosh®)	6.95	5.95	5.49	4.75
33398	TL5104P	3.6V/1.9Ah/.579"	Lithium	Barrel w/ lead (clock/memory)	7.95	6.95	5.95	4.95
146114	TL2100S	3.6V/1.9Ah/.579"	Lithium	Barrel pressure fit (clock/mem)	6.95	5.95	4.95	4.49
33427	TL5242W	3.6V/1.9Ah	Lithium	Battery pack w/ plug (PC)	9.95	8.95	7.49	6.49
33443	TL5293W	6.0V/1.9Ah	Lithium	Battery pack w/ plug (PC)	9.95	8.95	7.95	7.25
151095	N0216	9.0V/0.9Ah/1.0"L	Zinc chloride	Standard 9V with snaps	1.25	.99	.79	.65

Coin Cell Battery Holders

Part No.	Product No.	Description	1	10	100	500
38535	2S2032	Battery holder for CR2032 (PC mount)	\$.69	\$.59	\$.49	\$.35
38543	2S2325	Battery holder for (2) BR2325 or (1) 2354 (PC mount)	.75	.65	.55	.39

9 Volt Battery Snaps and Clip

- Use with standard 9 volt batteries Fully insulated; contacts are nickel plated brass Female inner Dia. = 0.215"
- Leads are clor coded andstripped and pre-tinned Snap: male outer diameter = 0.225" * 10 piece minimum Part



	Number	Fig.	Description	L	x W x	Н	1	10	100	1000
	11279*	1	3", 26 AWG, 6 prong battery snap	1.0	.50	-	*	\$.15	\$.12	\$.09
	105793	2	Battery holder clip (9 volt)	.63	.71	1.2	*	.15	.12	.09
	109153	3	6", 26 AWG, 6 prong battery snap	1.0	.50	-	*	.15	.12	.09
3	101469	3	10", 26 AWG, 4 prong battery snap	1.0	.50	-	.29	.22	.17	.14

TEMPEST Lead Acid Batteries

- .187" (except P/N 159679 .470") color coded terminals Rechargeable
- P/N 159679: Bolt terminals w/ bolt & nut set

Product Nominal Amp Charging Voltage

Sealed • UL approved • Two-year warranty

Must be recharged before use





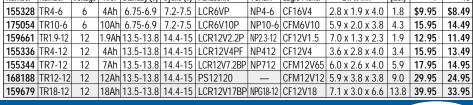
Size (Ins.)





Number	ivumber	voitage	Hrs.	Standby (v)	Cyclic (v)	Panasonic	YUASA	Eagle Picher	LXWXH	(IDS.)	l l	10
155328	TR4-6	6	4Ah	6.75-6.9	7.2-7.5	LCR6VP	NP4-6	CF16V4	2.8 x 1.9 x 4.0	1.8	\$9.95	\$8.49
175054	TR10-6	6	10Ah	6.75-6.9	7.2-7.5	LCR6V10P	NP10-6	CFM6V10	5.9 x 2.0 x 3.8	4.3	15.95	14.49
159661	TR1.9-12	12	1.9Ah	13.5-13.8	14.4-15	LCR12V2.2P	NP2.3-12	CF12V1.5	7.0 x 1.3 x 2.3	1.9	12.95	11.49
155336	TR4-12	12	4Ah	13.5-13.8	14.4-15	LCR12V4PF	NP412	CF12V4	3.6 x 2.8 x 4.0	3.4	15.95	13.49
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Cross Reference





Fuses, Fuse Clips, Holders, Plugs and Solar Panels

5mm x 20mm Miniature Fuses

Fast Acting Fuses

GMA Fuses: 5mm x 20mm



· Recommended for new design

· 250mA-5 amp (250V)

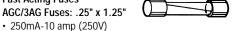
* Prepackaged: please order in increments of 10, 100 or 1000									
Part No.	Amps	10	100	1000					
103886	250mA*	\$.17	\$.13	\$.10					
102040	500mA*	.17	.13	.10					
103907	1 amp*	.17	.13	.10					
103915	2 amp*	.17	.13	.10					
103923	3 amp *	.17	.13	.08					

.25" x 1.25" Standard Fuses

5 amp*

Fast Acting Fuses

103931



* Prepackaged: please order in increments of 10, 100 or 1000									
Part No.	Amps	10	100	1000					
69403	250mA*	\$.15	\$.11	\$.07					
10410	500mA*	.15	.11	.07					
10372	1 amp*	.17	.12	.09					
10381	2 amp*	.15	.11	.08					
69438	3 amp*	.15	.11	.07					
10401	5 amp*	.15	.11	.07					
69462	10 amp*	.15	.11	.08					

Slow Blow Fuses MDL/3AG Fuses: .25" x 1.25"

250mΔ-10 amn (250\/)



230111	- 230HA-10 amp (230V)								
Part No.	Amps	1	10	100	1000				
25654	250mA	\$.45	\$.35	\$.29	\$.22				
25689	500mA	45	.35	.29	.25				
25638	1 amp	45	.35	.29	.22				
25646	2 amp	45	.35	.29	.22				
69534	3 amp	55	.45	.35	.29				
25671	5 amp	45	.35	.29	.22				
69569	10 amn	45	35	29	22				

5mm Miniature Fuse Clips

· Accepts 5mm fuses

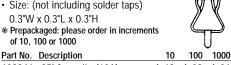
· Size: (not including 119280 102859 solder tabs) 102859: 0.3"W x 0.2"L x 0.4"H

119280: 0.2"W x 0.2"L x 0.5"H * Prepackaged: please order in increments of 10, 100 or 1000 Part No. Description 100 1000 102859 Fuse clip front leads * \$.12 \$.09 \$.06 119280 Fuse clip side leads* .12

.25" Standard PCB Fuse Clip

· Accepts .25" fuses · Tinned brass

· Size: (not including solder taps) 0.3"W x 0.3"L x 0.3"H



102841 .25" fuse clip (10A)......* \$.12 \$.09 \$.06

.25" Standard Fuse Clips

Screw Mount

- · Accepts 0.25" fuses
- · PC screw mount type
- · 10A rated current
- 164697 Size: 0.3"L x 0.3"W x 0.5"H
 164700

$\ensuremath{\mbox{\$}}$ Prepackaged: please order in increments of 10, 100 or 1000									
Part No.	Description	10	100	1000					
164700	45° fuse clip*	\$.05	\$.025	\$.01					
164697	90° fuse clip*	.05	.025	.01					

5mm x 20mm Miniature Fuse Holders

Accepts 5 x 20mm fuses including 1 *LR* GMA (left) and GMC series Straight solder terminal Includes washer and rear hex nut Size: 1.5"L x 0.6"Dia. 102824 Weight: .02 lbs. 150463: • 6A @ 250VAC 102824: • 10A @ 250VAC UL/CSA recognized Part No. Mounting Hole 150463 0.5"Dia. x 0.43" flats (2)\$.75 \$.59 \$.49

5mm x 20mm Miniature Low Profile Fuse Holder

Accepts 5 x 20mm fuses

102824 0.5"Dia., UL/CSA......

10A @ 250VAC

.08

- **UL/CSA** recognized
- Size: 1.4"L x 0.6"Dia.
- · Weight: .02 lbs.
- D Style mounting hole: 0.5"Dia x .46 flat (1) Part No. Description

102832 Fuse holder UL/CSA....\$1.25 5mm x 20mm Miniature In-Line

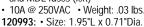
White Fuse Holder

- · Accepts 5 x 20mm fuses
- · Wire lengths: both 3.5"
- Built-in spring ensures good fuse connection
- Size: 2.1"L x 0.6"Dia. · Weight: .01 lbs.

Part No.	AWG	Color	Size(L)	1	10	100
109330	20	red	1.8"	\$.55	\$.45	\$.35

.25" x 1.25" Standard Panel Mount Fuse Holders

Accepts standard .25" x 1.25" fuses including AGC and MDL fuses (left)



· Mounting hole: 0.58"Dia.

18702: • Size: 2.05"L x 0.71"Dia. • UL/CSA recognized D style mounting hole: 0.58"Dia. x 0.52" flat (1)

Part No.	Cap Type 1	10	100
120993	Thumb screw cap\$.75	\$.59	\$.39
18702	Thumb screw cap, UL/CSA95	.75	.65

.25" x 1.25" Standard In-Line Fuse Holders

- Built-in spring ensures good fuse connection
- Accepts .25" x 1.25" fuses including AGC & MDL series
- · Vinyl covered wire with stranded copper center

		Wire	Wire	Body	Body			
Part No.	AWG	Lengths	Color	Size(L)	Color	1	10	100
109321	22	3.5/3"	red	2.4"	black	\$.49	\$.39	\$.32
102867	20	3/3"	red	2.2"	white	49	.39	.29
151917	18	6/6"	red	2.4"	white	65	.55	.45
108783	16	21/26"	orange	2.2"	black	79	.65	.49
108791	14	19/25"	red	2.5"	black	99	.79	.55

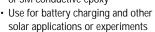
Information at Your Fingertips

Log on to our web site for specials, technical tips and expanded product information

www.jameco.com

, JAMECO 0.5 Watt Solar Panel

- Rated 9VDC @ 0.06A. .54 watt maximum (for maximum sunlight)
- · 9.5VDC open circuit
- · Output connection: conductive film requiring pressure contact or use of 3M conductive epoxy

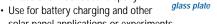


Size: 6.0"Sq. x 0.1"Thick
 Weight: 0.3 lbs.

Part No. Description 141751 0.5W solar panel......\$8.95 \$7.95 \$6.95

IAMECO 1.7 Watt Photovoltaic Solar Panel

- Rated 18.16VDC open circuit (max.)
- · 12.18VDC at 0.141mA in bright sunlight
- Output connection: conductive film requiring pressure contact or use of 3M conductive epoxy



12" x 12" x 3/32"

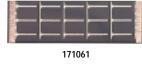
solar panel applications or experiments Use 2 or more panels in series or parallel

for increased output · Weight: 1.6 lbs. Part No. Description

106702 1.7W solar panel.....\$24.95 \$22.49 \$18.95

Photon Technologies Flexible Thin-Film Solar Panels

· Can be easily soldered to by (burning through) a thin polyester adhesive layer, over the copper contact with standard



soldering iron For recharging NiCad, Nickel Metal Hydride

- and Gel-cell batteries · Units can be joined together in series to increase voltage or paralleled to increase current
- Inexpensive and easy to adapt to various applications

• Size: 4.5"L x 1.46"W • Weight: 0.003 lbs.

Part No.	Output 1	10	100
172831	3VDC @ 10mA\$5.95	\$5.35	\$4.79
171061	3VDC @ 40mA 8.49	7.49	6.49

JAMECO Miniature Glass Solar Panels

 Operating temp. range: -5°C - +40°C



Storage temp. range: -20°C - +70°C

- · Open circuit voltage: 3.0VDC (P/N 171977); 16.5VDC (P/N 171985) in full sunlight
- · May be paralleled to increase current
- · May be seriesed to increase voltage · Wt.: .03 lbs.

Part No. Op. Voltage Size (L"xW") 1 171977 1.8VDC @ 26mA 2.0 x 1.4 ..\$6.25 \$5.49 \$4.95 171985 12VDC @ 3mA 3.6 x 1.06.25 5.49 4.95





Power Entry Filters and AC Plug Connectors 84















Fig. 1 (Solder Terminals)

Fig. 2 (Fast-on Terminals)

Fig. 3 (146907)

Fig. 4

Fig. 6 (117444)

· Frequency: 50/60Hz · Note: Terminal position may vary

¹ Includes spare fuse holder (Fuse type 5mm x 20mm (250V))





Fig. 9



Part	Product	Corcom			Current	Voltage		Agency	Terminal	Г)imensi	on (ins.	١	Weight		Prio	ina	
Number	Number	Cross	Description	Fig.	(Amps)		Terminals	Approvals	Size	A	В	C	D	(lbs.)	1	10	100	500
150615	03AC1	3EF1	Power entry filter, straight (flanged)	1	3	250	solder	UL/CSA/VDE	.16"	1.89	0.88	2.58	1.58	0.14	\$4.49	\$3.95	\$3.25	\$2.95
146907	03DENG3E	3	Power entry filter (snap-in)	3	3	250	fast-on	UL/CSA/VDE	.25"	1.25	0.95	2.23	N/A	0.14	3.95	3.49	2.95	2.49
40601	03AE1	3EF1F	Power entry filter, straight (flanged)	2	3	250	fast-on	UL/CSA/VDE	.25"	1.97	0.90	2.16	1.58	0.10	4.49	3.95	3.49	2.75
180620	06AR2D		Power entry filter, fused w/ switch (snap-in)	8	4	250	fast-on	UL/CSA/VDE/CE	.25"	2.65	1.15	2.38	N/A	0.30	4.95	4.49	3.95	3.49
42454	06AC1	6EF1	Power entry filter, straight (flanged)	1	6	250	solder	UL/CSA/VDE	.16"	1.96	0.88	2.06	1.58	0.10	4.95	4.49	3.75	3.49
63132	06AE1	6EF1F	Power entry filter, straight (flanged)	2	6	250	fast-on	UL/CSA/VDE	.16"	1.96	0.88	2.06	1.58	0.10	3.95	3.49	2.95	2.49
167441	10AE1	10EF1F	Power entry filter, straight (flanged)	2	10	250	fast-on	UL/CSA	.25"	1.97	0.89	2.65	1.58	0.15	4.95	4.49	3.95	2.95
165016	SUP-J150	G-E-2	Power entry filter straight (flanged)	1	15	250	solder	UL/CSA/VDE	.16"	1.89	0.88	2.18	1.58	0.10	1.95	1.75	1.49	1.25
16651	JR101		AC plug connector (male) flanged	4	15	250	fast-on	UL/CSA/VDE	.187"	1.96	0.89	1.07	1.58	0.03	.75	.59	.49	.39
147900	P0707		AC plug connector (male) flanged	4	15	250	solder	UL/CSA/VDE	.16"	1.96	0.89	1.04	1.58	0.03	.75	.59	.49	.39
147109	42R02		AC plug connector (male) snap-in	5	15	250	fast-on	UL/CSA/VDE	.25"	1.22	0.94	1.13	N/A	0.03	.89	.69	.55	.45
173770	6200-21		AC plug connector (male) fused (flanged)	7	10	250	fast-on	UL/CSA/VDE	.136"	1.73	1.34	1.00	1.41	0.03	1.25	.99	.85	.65
117444	0717		AC plug connector (male) fused (snap-in) ¹	6	10	250	fast-on	UL/CSA/VDE	.187"	1.22	1.33	1.22	N/A	0.04	1.49	1.35	1.09	.99
177332	PF1125		AC plug connector (male) fused (snap-in) ¹	6	10	250	fast-on	UL/CSA/VDE	.25"	1.22	1.34	1.24	N/A	0.04	1.49	1.35	1.09	.99
171563	P3520		AC power outlet (female) flanged	4	6	250	solder	UL/CSA/VDE	.11"	1.97	1.14	1.32	1.58	0.04	.65	.55	.39	.32
174246	SC11		AC power outlet (female) flanged	4	15	250	fast-on	UL/CSA/VDE	.187"	.197	1.17	1.34	1.58	0.04	.89	.69	.55	.45
184903	42R3631	52IOU	AC receptacle (male) w/ switch (snap-in)	9	15	250	fast-on	UL/CSA/VDE	.25"	1.30	1.58	1.42	N/A	0.05	3.95	3.49	2.95	2.49

DC Power Converters



3-30 Watt DC to DC Converters

Mean Well is an ISO-9002 Certified Company

- Short circuit/overcurrent protection
- · One year warranty

LAMBDA A

Fig. 2

Fig. 3

Fig. 4

Ripple Product Input Voltage Output Voltage Part Wattage Output Size Wt. p-p (mV) L" x W" x H" Fig. Current (mA) Pins Number Number (W) Range (VDC) (VDC) (lbs.) 10 DCW03A05 1.2 x 0.7 x 0.5 \$21.95 \$19.95 \$17.95 155918 +5 / -5 300 0.04 3 9-18 100 8 161701 DCW03A12 9-18 +12 / -12 100 1.3 x 0.8 x 0.5 21.95 19.95 17.95 1 3 125 8 0.05 2 29.95 26.95 23.95 155715 SKE15A05 15 9-18 3000 2.0 x 2.0 x 0.4 +5 50 4 0.2 29.95 26.95 23.95 155707 SKE15A12 2 15 9-18 +12 60 1250 4 2.0 x 2.0 x 0.4 0.2 2.0 x 2.0 x 0.4 155694 SKE15A24 2 15 9-18 +24 80 625 4 0.1 29.95 26.95 23.95 161728 +12 / -12 2.0 x 2.0 x 0.4 26.95 DKE15A12 15 9-18 60 625 5 0.2 29.95 23.95 PM3012S05 9-18 3.0 x 2.5 x 0.4 19.95 17.95 14.95 171344 30 6000 0.2 75 +5

40 to 220 Watt DC - DC Converters

- Over temperature and over voltage protection
- · Short circuit protection















188189 (Fig. 6)

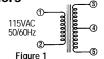


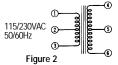
Part Number	Product Number	Fig.	Wattage (W)	Input Voltage Range (VDC)	Output Voltage (VDC)	Ripple p-p (mV)	Output Current (mA)	Pins	Size L" x W" x H"	Wt. (lbs.)	1	10
188226	AA40C048L050D	1	40	48	+5 / -5	120	4	10	3.0x3.0x0.5	0.2	\$24.95	\$22.49
188218	AK60A048L120F04G	2	50	48	12	150	4	8	2.4x2.3x0.5	0.3	29.95	26.95
188120	AK60A024L120F08	2	60	24	12	150	5	8	2.4x2.3x0.5	0.3	29.95	26.95
188162	QBRB075NJ	3	75	48	12	N/A	6.3	8	2.4x2.3x0.5	0.3	29.95	26.95
188171	AK60A048L150F05	2	75	48	15	150	5	8	2.4x2.3x0.5	0.3	29.95	26.95
188138	AK60A048L120F08G	2	100	48	12	150	8	8	2.4x2.3x0.5	0.3	29.95	26.95
188154	AK60A048L150F07G	2	100	48	15	150	7	8	2.4x2.3x0.5	0.3	29.95	26.95
188146	AK60A048L240F04G	2	100	48	24	150	4	8	2.4x2.3x0.5	0.3	29.95	26.95
188197	AK60C048L050F20G	4	125	48	5	150	20	9	2.3x2.4x0.5	0.3	29.95	26.95
188200	BK60A048L120F13G	5	150	48	12	100	13	8	2.4x2.3x0.5	0.3	29.95	26.95
188189	AK80A024L150F12	6	220	24	15	100	12	10	4.5x2.4x1.1	1.1	39.95	35.95



115VAC & 115/230VAC Power Transformers

Power transformers have both single and dual voltage input and center tapped outputs. This makes them the perfect choice for power supply design or for use in transformer, rectifier, and filter circuits.









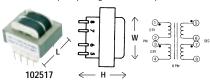


 Primary 	<i>ı</i> : 115VAC	, 115/230V	AC 50/60Hz	* Center tap
Part	Product	Triad		Input
Number	Number	Cross	Voltage	Color Code

Part	Product	Triad		Input			0	utput			Lead		Dime	nsions (lns.)	Weight		Pricing	
Number	Number	Cross	Voltage	С	olor Cod	de	Voltage	(Color Co	de*	Type	Fig.	L"	W"	H"	(lbs.)	1	10	100
29225	XFR122	F44X	115VAC	Yellow	_	Yellow	12.6VCT @ 2A	Blue	Red*	Black	Wire	1	2.12	2.33	1.96	1.5	\$8.49	\$7.49	\$6.49
102120	XFR124	F181U	115VAC	Black		Black	12.6VCT @ 4A	White	Black*	White	Wire	1	2.53	3.08	2.61	2.7	9.95	8.95	7.95
112512	XFR242N	F229X	115VAC	Black	_	Black	24VAC @ 2A	White	_	White	Wire	3	1.75	2.75	2.25	1.8	7.95	6.95	5.95
99653	XFR242	_	115VAC	Red	_	Red	24.6VCT @ 2A	Blue	Yellow*	Blue	Wire	1	2.44	2.70	2.30	2.5	7.95	6.95	6.25
168524	XFR252	F41X	115VAC	Black		Black	25.2VCT @ 2A	Red	Red	Red	Wire	1	2.35	4.00	2.61	2.2	6.95	6.25	4.95
102162	XFR6102	F314X	115/230VAC	Black	Yellow*	Red	6.3VCT @ 1.2A	White	Black*	White	Wire	2	1.56	1.96	1.67	0.8	5.95	5.35	4.79
105523	XFR0910	_	115/230VAC	Black	White*	Red	9VCT @ 1A	Blue	Black*	Blue	Wire	2	1.79	1.96	1.66	0.7	5.95	5.35	4.79
102154	XFR1220	F344X	115/230VAC	Black	Yellow*	Red	12.6VCT @ 2A	White	Black*	White	Wire	2	2.35	2.32	1.97	1.5	8.49	7.49	6.49
149770	XFR1240	F3181U	115/230VAC	Black	Red*	Yellow	12.6VCT @ 4A	White	Black*	White	Wire	2	2.45	2.70	2.24	2.2	9.95	8.95	7.95
105531	XFR1810	_	115/230VAC	Blue	Red*	Black	18VCT @ 1A	Yellow	Black*	Yellow	Wire	2	2.32	2.05	1.90	1.2	7.49	6.75	5.95
149956	XFR1820	_	115/230VAC	Black	Red*	Yellow	18VCT @ 2A	White	Black*	White	Wire	2	2.26	2.66	2.28	1.8	7.95	6.95	5.95
102111	XFR2410	F346X	115/230VAC	Black	Yellow*	Red	24VCT @ 1A	White	Black*	White	Wire	2	2.22	2.33	1.97	1.5	6.95	6.25	5.59
102103	XFR2520	F341X	115/230VAC	Black	White*	Red	25.2VCT @ 2A	Orange	Black*	Orange	Wire	2	2.45	2.67	2.26	2.8	9.95	8.95	7.95
149796	XFR2820	F3185U	115/230VAC	Black	Red*	Yellow	28VCT @ 2A	White	Black*	White	Wire	2	2.45	2.70	2.24	2.3	9.95	8.95	7.95

Non-concentrically wound with primaries and secondaries side-by-side providing low capacitive coupling.

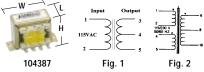
- Primary: 115/230VAC 50/60Hz
- · PC terminal pin spacing for accurate placement



115/230VAC Split-Bobbin Power Transformers

	Part	Product	Triad	Input	VA	Individual	Parallel	Series	Din	nensi	ons	Wt.		Pricing	
	Number	Number	Cross	Voltage	Cap	Output	Output	Output	L"	W"	H"	(lbs.)	1	10	100
	102517	XFR1602SB	FS16150	115/230	2.4	8V@ .15A	8V@ .30A	16VCT@ .15A	1.17	1.38	1.20	0.3	\$5.95	\$5.35	4.75
	157702	EU06-2-010	FS10600	120/240	6.0	5V@ .60A	5V@ 1.20A	10VCT@ .60A	1.50	1.88	1.04	0.3	4.95	4.49	3.95
	157711	EU06-2-020	FS20300	120/240	6.0	10V@ .30A	10V@ .60A	20VCT@ .30A	1.48	1.88	1.08	0.3	4.95	4.49	3.95
c	176090	SPT41240-120	FS24250	115/230	6.0	12V@ .25A	12V@ .50A	24VCT@ .25A	1.33	1.63	1.59	0.5	5.49	4.95	4.49
	102533	XFR1205SB	FS12500	115/230	6.3	6.3V@ .50A	6.3V@ 1.00A	12.6VCT@ .50A	1.31	1.62	1.30	0.4	6.49	5.75	4.95
	102592	XFR2405SB	FS24500	115/230	12.0	12V@ .50A	12V@ 1.00A	24VCT@ .50A	1.58	1.90	1.46	0.7	6.49	5.75	4.95

- · Quick connect transformers are bobbin wound for smaller size and reduced electrostatic shielding requirements
- · Terminals: quick connect, solder
- Input voltage: 115/230VAC, 50/60Hz



115VAC & 115/230VAC Quick Connect Power Transformers

	Part	Product	Triad		Input	Output		Size of	Dir	nensio	ons	Wt.		Pricing	
	Number	Number	Cross	Fig.	Voltage	Voltage	VA Cap	Connect	L"	W"	Н"	(lbs.)	1	10	100
	164110	241-3-10	F310	1	115VAC	10VCT@ 0.25A	2.4	0.187"	.59	1.45	2.00	0.2	\$2.95	\$2.25	1.95
	104387	XFR1225Q	FD612	2	115/230VAC	12.6VCT@ 2.5A	31.5	0.187"	1.75	2.33	2.00	1.3	8.95	7.95	6.95
8	104408	XFR1635Q	FD716	2	115/230VAC	16VCT@ 3.5A	56.0	0.187"	2.00	2.70	2.30	1.8	9.95	8.95	7.95
,	101864	XFR2424Q	FD724	2	115/230VAC	24VCT@ 2.4A	57.6	0.187"	1.87	2.70	2.25	1.7	8.95	7.95	6.95
0	176102	XFR2440Q	FD824	2	115/230VAC	24VCT@ 4.0A	96.0	0.187"	1.74	3.10	2.62	3.6	12.95	11.49	9.95
	104416	XFR3615Q	FD736	2	115/230VAC	36VCT@ 1.5A	54.0	0.187"	1.90	2.70	2.30	1.8	8.95	7.95	6.95

Use European appliances w/ U.S. receptacles!

- · Allows primary power flexibility when buying or designing equipment for the worldwide market place
- Wide selection to meet your design requirements







Fig. 3

110VAC to 220VAC Step-Up / 220VAC to 110VAC Step-Down Transformers

Part	Product		Power	Primary	Secondary	Di	mension	ıs	Weight		Pricing	
Number	Number	Fig	(VA)	Voltage	Voltage	H"	W"	D"	(lbs.)	1	10	100
99573	AC110V50	1	50	220VAC	110VAC	2.50	1.63	1.33	0.7	\$5.95	\$5.35	\$4.79
85016	AC110V300	3	300	220VAC	110VAC	3.50	3.05	3.95	4.8	24.95	22.49	19.95
111851	AC110V500	2	500	220VAC	110VAC	3.99	3.60	4.84	8.5	31.95	28.95	25.95
142906	AC110V1500	2	1500	220VAC	110VAC	5.25	4.50	5.75	15.2	69.95	59.95	56.95
99477	AC220V50	1	50	110VAC	220VAC	2.50	1.63	1.33	0.7	5.95	4.95	4.79
85008	AC220V300	3	300	110VAC	220VAC	3.50	3.05	3.95	4.8	24.95	22.49	19.95

Triad 220VAC to 110VAC **Step-Down Auto Transformer**

- 200 VA
- · Primary voltage: 220VAC (50-500Hz)
- · Secondary voltage: 110VAC (200VA)
- · 3" lead wire
- Type U case style
- Size: 2.9"W x 2.4"D x 3.4"H
- · Weight: 3.6 lbs.

Part No.	Product No.	1	10	100
175100	N6U	\$17.95	\$15.95	\$13.95

JAMECO 120VAC to 120VAC **Isolated Transformer**

300VA (Watts)

- · Input voltage: 120VAC @ 60Hz
- · Input connector: 5.5' cord with 2-prong plug
- Output voltage:
- 120VAC @ 2.5A (Isolated)
- Size: 4.2"H x 3.2"W x 4.6"D

 vveignt 	: 7.0 IDS.			
Part No.	Product No.	1	10	100
181315	ITR300	\$34.95	\$31.49	\$27.95

Valcor ISDN Transformer

· DC resistance: pins 2 and 7: 13.5Ω ; pins 5 and 4: 7.5Ω ; pins 6 and 3: 9.5Ω (max.)



· Dielectric withstanding voltage: 60Hz, 1 min. 200Vrms

Part No.	Product No.	1	10	100
172081	PT4084	\$1.15	\$.95	\$.75

See pages 86 – 90 for more transformers









Variable and Toroidal Transformers

AVEL..... Dual Output Toroidal Transformers

- Input voltage: 115/230VAC @ 47/400Hz
- · 13% load regulation

86

- · Secondary voltage tolerance: within 3% at nominal input and full load
- 8-32 mounting hole (top and bottom)

† 171310: Output voltage: 15VAC @ 0.66A; 36VAC @ 1.1A





Wire Terminal

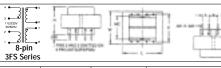
Part		Output	Output	Output (/AC @ A)	Size	Wt.		Pricing	
Number	VA	Voltage	Terminals	Parallel	Serial	(D"xH")	(lbs.)	1	10	25
170448	15	6VAC @ 1.25A	Terminals	6 @ 2.50	12 @ 1.25	2.5 x 1.3	0.8	\$6.95	\$5.95	\$4.95
170704	30	6VAC @ 2.5A	16" Wire	6 @ 5.00	12 @ 2.50	3.3 x 1.3	1.4	7.95	6.95	5.95
170747	30	6VAC @ 2.5A	Terminals	6 @ 5.00	12 @ 2.50	3.1 x 1.4	1.3	7.95	6.95	5.95
168372	15	9VAC @ 0.83A	12" Wires	9 @ 1.66	18 @ 0.83	2.7 x 1.2	0.9	8.95	7.95	6.95
170755	30	9VAC @ 1.67A	Terminals	9 @ 3.34	18 @ 1.67	3.2 x 1.4	1.4	7.95	6.95	5.95
170771	50	9VAC @ 2.8A	16" Wire	9 @ 5.60	18 @ 2.80	3.7 x 1.5	2.1	7.95	6.95	5.95
170819	50	9VAC @ 2.8A	Terminals	9 @ 5.60	18 @ 2.80	3.6 x 1.5	2.0	7.95	6.95	4.95
171336	50	12VAC @ 2.0A	Terminals	12 @ 4.00	24 @ 2.00	3.6 x 1.6	1.9	7.95	6.95	5.95
170843	90	12VAC @3.75A	12" Wires	12 @ 7.50	24 @ 3.75	4.0 x 1.7	3.0	10.95	9.95	8.95
171310	50	15VAC @ 0.66A [†]	Terminals	_	_	3.6 x 1.5	2.1	6.95	5.95	5.49
163889	50	20VAC @ 1.25A	Terminals	20 @ 2.50	40 @ 1.25	3.6 x 1.5	2.0	9.95	8.95	7.95
168364	130	35VAC @ 0.85A	22" Wires	35 @ 1.70	70 @ 0.85	4.7 x 2.0	4.1	9.95	8.95	7.95

Tamura Split-Bobbin & MicroTran Audio Transformers

- · Input voltage: 115/230
- · Weight: 0.4 lbs.

Split-Bobbin Transformers

• Primary: 115/230 @ 50/60Hz





Part	Product	Signal	VA	Individual	Parallel	Series	Dimensions	Prici	ng
Number	Number	Equivalent	Cap	Output	Output	Output	(L" x W" x H")	1	10
183732	3FS-312	ST3-12	2.4	6.3 @ 0.4	6.3 @ 0.2	12.6 @ 0.2	1.4 x 1.2 x 1.0	\$6.95	\$6.49
183741	3FD416	DST4-16	6.0	8.0 @ 0.8	8.0 @ 0.4	16.0 @ 0.4	1.7 x 1.4 x 1.4	8.29	7.49
183759	3FD420	DST4-20	6.0	10.0 @ 0.6	10.0 @ 0.3	20.0 @ 0.3	1.7 x 1.4 x 1.4	8.29	7.49

MicroTran Voice/Data Coupling Transformer

Part	Product	Primary	Secondary	Primary	Secondary	Size		Pricing	
Number	Number	Impedance	Impedance	Resistance	Resistance	L" x W" x H"	1	10	100
183767	T1104	600Ω	600Ω	66Ω	102Ω	0.4 x 0.6 x 0.5	\$12.95	\$11.49	\$9.95

181622

181649

ISOSENSE Over Current Detectors, Evaluation Boards, And Accessory BusBar

Specs for Over Current Detectors

• Supply voltage: -1.0 to 25VDC

· Supply current: 10mA maximum

• Operating temp.: -40°C to 125°C

· Output trip time: 1uS

· Output on voltage: 0.15VDC typical (VDC sinking 20mA)

· Output on current: 20mA

• 181614: Trip current: 50A @ 25°C

• 181622: Trip current: 125A @ 25°C

· 181631: 50A evaluation board

• 181649: 125A evaluation board

 181657: 75A current bar sensor 181657 Part No. Product No. Description 10 **181614** 9001-050 Current detector..\$7.95 \$6.95 \$6.25

181622 9001-125 Current detector ... 7.95 6.95 6.25 181631 9001-050EVB Evaluation brd 19.95 17.95 15.95 181649 9001-125EVB Evaluation brd 19.95 17.95 15.95 **181657** 9002-001 Current bar sensor .79

CUI STACK 600Ω **Modem Coupling Transformer**

- Impedance (primary) secondary): $600\Omega/600\Omega$
- Resistance (primary/ secondary): $87\Omega/108\Omega$
- Measuring frequency: 1KHz, 1VDC bias 90mA
- Frequency response: ±2dB @ 300-600Hz; ±0.75dB @ 600-3500Hz • Weight: 0.1 lbs.

Part No. Product No. 167169 TL1919......\$1.25

JAMECO 5VA and 10VA Current Class 1 Transformers

Accuracy: Class 1

This series can be applied to test, control, display, and record the running of electrical equipment, and to protect the equipment against damage in the AC circuit.

- 174887: ratio 200A/5A; 5VA
- 174895: ratio 400A/5A; 10VA
- Maximum voltage: 660VAC Frequency: 50/60Hz
- Includes mounting bracket and hardware
- Size: 3.0"L x 3.2"W x 1.6"Thick Weight: 1.1 lbs.

Part No. Prod. No. VA (watts) 174887 MSQ30 \$2.75 174895 MSQ40

110/220VAC Variable AC **Transformers**

- · Input: 110VAC or 220VAC
- · Power: 500-2000VA
- · Output: 0-240VAC
- · Banana/screw input terminals
- Universal US/European output plugs

· Lighted on/off power switch



	•		
Part No.	Fuse	Size (L" x W" x H")	Wt. (lbs.)
121275	3A/250V (P/N 69438)	5.3 x 7.3 x 7.0	10.4
129007	5A/250V (P/N 10401)	9.4 x 6.5 x 7.7	14.8
152581	10A/250V (P/N 69462)	9.0 x 7.0 x 7.7	19.8

Part No.	Description 1	5
121275	500VA variable transformer\$79.95	\$69.95
129007	1000VA variable transformer119.95	99.95
152581	2000VA variable transformer164.95	149.95

110VAC Variable AC Transformer

- Input voltage: 110VAC @ 60Hz (using pin 1-2) 110VAC @ 50Hz (using pin 1-4)
- Power: 320VA
- Matching input/output terminals: P/N 103667 and 109111

(disconnect .25" solderless terminals) - pg 64

- · Includes 3 disconnect .25" solderless terminals
- · Maximum current: 2.5A · Panel mount
- Size: 2.8"Dia. x 2.1"H
 - · Shaft length: 0.5"
- · Weight: 2.5 lbs.
- · One-year warranty

169640

169658

Part No. Product No. Description 149323 PSV203 320VA variable....\$49.95 \$44.95

AEEC 110VAC Variable AC Transformers

- Input voltage: 110VAC @ 60 Hz
- · Power: 500 and 2000VA
- · Output voltage: 0 to 130VAC
- · Input connector: 3-prong plug with 5' cord
- · Output connector: 3 prong outlet type
- · Output analog voltmeter
- · Lighted on off power switch
- 169640: 5A @ 250V fuse Size: 8.3"L x 6.5"W x 7.0"H
- Weight: 15.6 lbs.
- 169658: 18A @ 250V fuse Size: 9.8"L x 8.0"W x 7.0"H

· Weight: 26.5 lbs. Part No. Description

169640 500V variable transformer \$64.95 \$59.95 169658 2000V variable transformer 124.95 114.95

110VAC Variable AC Transformer

- Input voltage: 110VAC @ 60Hz
- Power: 550VA
- · Output voltage: 0-140VAC
- · Panel mount

174887

- · Rated current: 5A
- Input/output terminals: binding post with 0.188" diameter post
- · One-year warranty
- · Size: 4.3"Dia. x 4.0"H
- · Weight: 6.8 lbs.

Part No. Product No. Description 550VA variable....\$69.95 \$62.95 152936 PSV264





Audio Transformers

- · Vacuum wax impregnated
- Insulation resistance: $100M\Omega$
- Hipot tested: 100VAC Weight: 0.3 lbs.
- ±20% impedance matching

Product

125356 XFR6006A14

125401 XFR60066A14

Number Number

170077 TL018

±20% DC resistance matching







.89

	125356			Fig.	1			Fig. 2	
sista	nce (Ω)	Core	Dimensions						
Pri.	Sec.	Type	H"	W"	D"		1	10	100
65	55	EI-14	0.43	0.57	0.55	\$1	1.49	\$1.25	\$.99
72	56/56	EI-14	0.43	0.57	0.55	1	1.49	1.25	.99

Green Power Jacks (Male & Female)

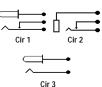
Blue

Blue

2 600CT

- · Connections do not include nuts
- · Use with mating power plugs (below)
- · Dimensions do not include barrel
- · Weight: .01 lbs. † Krinkle leads
- * Prepackaged: please order in increments of 10, 100 or 1000

Terminals	Code
Solder eyelet	Α
PC board	В
Mounting	Code
Panel	С
PCB	D
Panel & PCB	E
Cable	F





Impedance (Ω) Re

600CT

600/600

Color Fig. Primary Secondary

600CT

1 7000CT 1000CT



Type 10



400 | 385 | EI-14 | 0.45 | 0.59 | 0.50 |

Type 2



1.09

Type 4

Part Number	Product Number	Description (Jack)	Dimensions H x W x D (mm)	Type/	Cir/ Terminals	Mating Plug (below)	1	10	100	1000
169498	PJ0253	2.5 mm female	` ′	3E	2A	2.5 mm male	*	\$.15	\$.12	\$.09
145648	PJ0351	3.5 mm female	9.7 x 10.0 x 15.5	7D	2A	3.5 mm male	.39	.32	.25	.19
164953	PJ0351N	3.5 mm female	9.9 x 10.2 x 15.4	11D	2A	3.5 mm male	*	.19	.15	.09
101143	PJ0352	3.5 mm female	10.0 x 10.0 x 18.5	3E	2A	3.5 mm male	.39	.32	.25	.17
109495	PJ035PM	3.5 mm female	10.5 x 9.0 x 8.8	4C	2A	3.5 mm male	.39	.32	.25	.19
165729	PJ0354	3.5 mm female	8.9 x 5.7 Dia.	12C	2A	3.5 mm male	.39	.32	.25	.15
101194	PP024	1.3 mm male	6.0 x 6.0 x 9.0	10D	1B	1.3 mm female	.55	.45	.29	.22
109508	PJ021PCB	2.1 mm male	9.0 x 12.7 x 15.8	5D	1A	2.1 mm female	*	.12	.09	.07
101178	PP014	2.1 mm male	10.9 x 9.0 x 14.5	1D	1A	2.1 mm female	.49	.39	.32	.22
137672	PP013	2.1 mm male	10.9 x 9.0 x 14.5	6D	3A	2.1 mm female	.49	.39	.32	.22
151589	DPJ-02IA	2.1 mm male	13.0 x 12.6 Dia.	9C	1A	2.1 mm female	.69	.59	.49	.39
151554	DPJ-026A	2.1 mm male	15.1 x 8.0 Dia.	8E	1A	2.1 mm female	1.09	.89	.75	.65
159610	PJ1014A	2.1 mm male	35.8 x 12.6 Dia.	13F	Α	2.1 mm female	.89	.75	.65	.49
109428	PJ025PCB	2.5 mm male	8.0 x 12.0 x 9.6	5D	1A	2.5 mm female	*	.07	.04	.01
101186	PP014A	2.5 mm male	11.0 x 9.0 x 14.5	1D	1A	2.5 mm female	.45	.35	.29	.22
167177	PP014AK	2.5 mm male	10.9 x 9.0 x 14.1	1D	1A [†]	2.5 mm female	*	.25	.19	.15
102091	PP15A	2.5 mm male	20.4 x 9.3 x 11.7	2C	1A	2.5 mm female	*	.22	.12	.09
151562	DPJ-026	2.5 mm male	15.1 x 8.0 Dia.	8E	1A	2.5 mm female	.89	.75	.65	.49

159505 PJ1015A 2.5 mm male 35.8 x 12.6 Dia. Power Plugs (Male & Female)

- · Use with mating power jack found in table (above)
- Solder eyelets 1mm diameter Plastic screw-on housing

1.3 mm x 3.5 mm female plug

2.5 mm x 5.5 mm female

2.5 mm male (P201) plug

3.5 mm male (P202) plug

147459 PJ1025L 2.5 mm male (P201L) plug

147344 PJ1035L 3.5 mm male (P202L) plug

2.1 mm x 5.5 mm female (P205) plug

2.1 mm x 5.5 mm female (P205L) plug

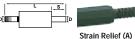
2.1 mm x 5.5 mm female right angle plug

2.5 mm x 5.5 mm female (P206) plug

2.5 mm x 5.5 mm female (P206L) plug

- Use with AC/DC wall transformers (pgs 88-90)
- · Use 24 AWG 2 conductor wire, P/N 100280, to make custom length power cables (pg 68)
- · Shield crimp tabs · Weight: .01 lbs.

Part No. | Product No. | Description (Plug)



2.5 mm female







Female to female (B)

52.0 x 10.0 x 14.5 x 5.0 2A

Strain Relief (C)

Female (1)

Male (2)

49

	L x D x S x ID (Strain relief) mm	Туре	1	10	100	1000
	44.0 x 8.9 x 9.5 x 4.6	1A	\$.55	\$.45	\$.35	\$.29
	40.5 x 8.6 x 9.5 x 4.1	1A	.49	.39	.32	.25
	47.0 x 9.3 x 14.0 x 4.5	1A	.45	.35	.29	.22
,	23.0 x 12.0 x 12.5 x 4.2	1B	.69	.59	.39	.35
	36.9 x 8.2 x 22.0 x 3.8	1C	.45	.35	.29	.17
	40.0 x 8.3 x 9.5 x 4.1	1A	.45	.35	.29	.22
	47.0 x 9.1 x 14.0 x 4.5	1A	.45	.35	.29	.17
	44.0 x 10.0 x 11.3 x 4.1	2A	.25	.22	.15	.12
	49.0 x 10.0 x 11.3 x 4.5	2A	.35	.29	.19	.15
	E2 0 y 10 0 y 14 4 y 4 4	24	45	25	20	10

COILCRAFT Current Sensing Transformer

1 Volt / 1 Amp

- · Sensed current max.: 10A
- Sensitivity voltage (Vout): 1
 - Sensitivity current (lin): 1A
- Frequency range: 20-50KHz Turns: 50 Inductance: 50mH
- Terminating resistor: 50Ω
- Size: 0.77"L x 0.57"W x 0.75"H Weight: 0.02 lbs.

art No.	Product No.	1	10	100
54659	CS4050V\$	1.95	\$1.75	\$1.25

JAMECO Current Sensing Transformer 1 Volt / 1 Amp

- · Max. current: 300mA (terminals 1 & 3)
- · Sensitivity voltage (Vout): 1 · Turns: 60
- Sensitivity current (lin): 1 Frequency range: 10-50KHz Inductance: 5mH Terminating resistance: 50Ω
- Size: 0.8"H x 0.7"W x 0.4"T
 Weight: 0.01 lbs.

Part No.	Product No. 1	10	100
164718	MTC30101\$1.75	\$1.49	\$1.25

PREM® Voice/ Data Coupling Transformer

- Impedance (primary/secondary): $600\Omega/600\Omega$
- Resistance (primary/secondary): $63\Omega/88\Omega$ • Turns ration (±2%)
- Frequency response: 300-3500Hz (±0.5dB)
- Dielectric strength: 1500VAC (pri-sec core)
- · Max DC unbal: 60mA · Weight: 0.1 lbs.

Part No.	Product No.	1	10	100
164128	SPT115	\$.99	\$.75	\$.49

.551 max

.571 max

141621

※ Nidcom Modem Coupling Transformers

- Pri./sec. impedance: 600Ω
- Dielectric strength: 1250VAC
- UL/CSA approved
- 141621: Jameco
- · Insertion loss: 1.25dB @ 1kHz
- Resistance: primary (46.5 Ω); secondary (67.6Ω)

117760: Midcom

- · DC current: 30mA
- Insertion loss: 2.5dB @ 1kHz
- Resistance: primary (108Ω);

secondary (120 Ω) 173921: • Insertion toss: 0.75dB ± .25 dB @ 1KHz

DC resistance: (25.1Ω) primary; (20.3Ω) secondary

173921	671-8000 (Midcom)1	1.49	1.25	.99
117760	671-8014 (Midcom)1	1.95	1.75	1.49
141621	671-8255 (Jameco) \$1	1.95	\$1.75	\$1.49
Part No.	Product No.	1	10	100

MagneTek Current **Sensing Transformers**

20KHz to 200KHz



- Reliable and operate effectively over the frequency range of 20KHz to 200KHz
- Used to detect current passing through a conductor
- · Constructed of UL rated 130°C materials

Part No.	(20KHz)	Turns Count	Min. Ind. (mH)	DCR Max. (Ω)	Pri. Amps (RMS)
168786	4000	200	56.0	3.50	80.0
168778	6000	300	130.0	12.40	70.0
168794	500	50	3.5	.34	35.0
Part No.	Product N	0.		1 1	0 100

300	50	3.5	.54	33.0
Product I	Vo.	1	10	100
CST206	-2A	\$.85	\$.69	\$.59
CST206	-3T	85	.69	.59
CST306	-1T		.69	.59
	Product I CST206 CST206	Product No. CST206-2A CST206-3T	Product No. 1 CST206-2A \$.85 CST206-3T .85	CST206-2A \$.85 \$.69



71191 PP137

147328 PP049L

138587 PJ021R

168241 PP109N

28767 | PP109

147336 PP109L

101135 PJ1025

101151 PJ1035

PP049







We specialize in Wall Transformers - Manufacturer may vary - call for additional OEM PRICING.

AC to AC Wall Transformers (Input: 120VAC 60Hz)

• Current rating to 2.4 amp







Can change any power plug (see page 87) on any AC wall transformer listed (100 pcs. min.)

02

Part	Product	Outpu	t Rating	Output Plug / Polarity	Dime	nsions	(in.)	Case	DC Cord	Wt.	UL Listed		Pric		
Number	Number	Voltage	Current	ID x OD (mm) Plug Type	Н	W	D	Color	Length (ft.)	(lbs.)	CSA/CUL Approved	1	10	50	100
101127	DFX10096B	7 VAC	1500 mA	2.5 mm x 5.5 mm female	1.88	2.20	1.95	Black	7' 6"	0.8	UL, CSA	\$4.95	\$4.49	\$3.95	\$3.25
163310	43-3003	9 VAC	50 mA	2.1 mm x 5.5 mm female	2.20	1.75	1.45	Black	6'	0.3	UL, CUL	1.95	1.75	1.49	1.25
184751	M/N40	9 VAC	450 mA	2.1 mm x 5.5 mm female	2.75	1.97	1.68	Black	6'	0.8	UL, CSA	3.95	3.49	2.95	2.49
100061	AC905F1★	9 VAC	500 mA	2.1 mm x 5.5 mm female	2.35	1.95	1.56	Black	6'	0.6	UL, CSA	4.95	4.49	3.95	3.49
119204	A41090800	9 VAC	800 mA	2.1 mm x 5.5 mm female	2.55	1.91	1.74	Black	6'	0.6	UL	3.95	3.49	2.95	2.49
120141	AC908M3	9 VAC	800 mA	3.5 mm male	2.55	1.91	1.74	Black	6'	0.5	UL	3.95	3.49	2.95	2.49
102234	AC910F1★	9 VAC	1000 mA	2.1 mm x 5.5 mm female	3.20	2.24	1.93	Black	6'	0.6	UL, CSA	5.95	5.35	4.79	4.29
157041	41A9-1000	9 VAC	1000 mA	2.5 mm x 5.5 mm female	2.06	2.12	1.63	Black	6'	0.6	UL, CSA	5.95	5.35	4.79	4.29
112336	AC915F5★	9 VAC	1500 mA	2.5 mm x 5.5 mm female	2.50	2.20	1.96	Black	6'	0.9	UL	6.95	6.25	5.59	4.95
167089	N3511-1215-AC	12 VAC	150 mA	2.1 mm x 5.0 mm female	2.28	1.78	1.46	Black	6'	0.3	UL, CSA	2.95	2.49	2.25	1.95
101258	41A12-500★	12 VAC	500 mA	2.1 mm x 5.5 mm female	2.76	1.97	1.60	Black	6'	0.6	UL, CSA	4.95	4.49	3.95	3.25
147361	W41AJ700	12 VAC	700 mA	2.5 mm x 5.5 mm female	2.56	1.94	1.74	Black	6'	0.6	UL, CSA	3.95	3.49	2.95	2.49
10081	AC1210F1★	12 VAC	1000 mA	2.1 mm x 5.5 mm female	2.56	2.39	1.99	Black	6'	0.7	UL, CSA	5.95	5.35	4.79	4.29
100167	AC1210F5	12 VAC	1000 mA	2.5 mm x 5.5 mm female	3.20	2.41	2.00	Black	6'	0.7	UL, CSA	5.95	5.35	4.79	4.29
10428	AC1210M3★	12 VAC	1000 mA	3.5 mm male	2.60	2.40	1.97	Black	6'	0.6	UL, CUL	5.95	5.35	4.79	4.29
167151	HET57116	12 VAC	1500 mA	2.1 mm x 5.5 mm female	3.36	2.68	2.15	Black	6'	1.5	_	5.95	5.35	4.79	4.25
153761	AC1216M3	12 VAC	1600 mA	3.5 mm male	2.50	2.21	1.92	Black	6'	0.9	UL	6.95	6.25	5.59	4.95
171408	AC1405F1	14 VAC	500 mA	2.1 mm x 5.5 mm female	2.76	1.97	1.60	Black	6'	0.6	UL, CSA	4.95	4.49	3.95	3.49
171854	DV1485AC	14 VAC	850 mA	2.5 mm x 5.5 mm female rt angle	3.00	1.95	1.69	Black	6'	0.7	UL, CUL	3.95	3.49	2.95	2.49
100108	AC1610F1★	16 VAC	1000 mA	2.1 mm x 5.5 mm female	2.50	2.35	1.95	Black	6'	0.9	UL, CSA	7.95	6.95	6.25	5.59
163053	035-0165	16 VAC	1100 mA	2.5 mm x 5.5 mm female	3.20	2.30	1.80	Black	6'	1.1	UL, CSA	2.95	2.49	2.25	1.95
121216	AC1810F1★	18 VAC	1000 mA	2.1 mm x 5.5 mm female	3.11	2.36	1.85	Black	6'	1.1	UL, CUL	7.95	6.95	6.25	5.59
158123	AC1810M3	18 VAC	1000 mA	3.5 mm male	3.05	2.26	1.89	Black	6'	1.0	UL, CSA	7.95	6.95	6.25	5.59
185439	T5182200-A020G	18 VAC	1850 mA	2.1 mm x 5.5 mm female rt angle	3.34	2.69	2.19	Black	6'	1.7	UL, CSA	7.95	6.95	6.25	5.59
87581	AC2405F1★	24 VAC	500 mA	2.1 mm x 5.5 mm female	2.50	2.24	1.92	Black	6'	0.9	UL, CSA	6.95	6.25	5.59	4.95
140599	AC2410F1	24 VAC	1000 mA	2.1 mm x 5.5 mm female	3.00	2.20	1.90	Black	6'	1.2	UL, CSA	7.95	6.95	6.25	5.59
10102	AC2410M3★	24 VAC	1000 mA	3.5 mm male	3.00	2.20	1.90	Black	6'	1.2	UL, CSA	7.95	6.95	6.25	5.59
176356	WP573024	24 VAC	1250 mA	2.1 mm x 5.5 mm female	3.36	2.67	2.20	Black	5'8"	1.6	UL, CSA	8.95	7.95	6.95	6.25

DC Wall Transformers





We specialize in Wall Transformers – Manufacturer may vary – call for additional OEM PRICING.

AC to DC Wall Transformers (Input: 120VAC 60Hz)







167142 Polarity 2 (-) (center positive)

Polarity	1 +	(center	negative)	any DC wall to	any DC wall transformer listed (100 pcs. min.)						Polarity 2 — (center positive)					
Part	Product	Output	Rating	Output Plug / Polarity	1 3 ,				DC Cord	Wt.	UL Listed		Pric	ing		
Number	Number	Voltage	Current	ID x OD (mm) Plug Type	Н	W	D	Color	Length (ft.)	(lbs.)	CSA/CUL Approved	1	10	50	100	
112070	DC502F5★	5 VDC	225 mA	2.5 mm x 5.5 mm female 2	1.90	2.20	1.95	Black	7'	0.3	UL, CSA	\$4.95	\$4.49	\$3.95	\$3.49	
164101	DCR505F12	5 VDC	500 mA	2.1 mm x 5.5 mm female 2 (regulated)	2.76	2.02	1.59	Black	6'	0.6	_	6.95	6.25	5.59	4.95	
155601	DC510F1	5 VDC	1000 mA	2.1 mm x 5.5 mm female 2	2.58	1.96	1.71	Black	7' 4"	0.7	UL, CSA	5.95	5.35	4.79	4.29	
167142	DCR510F12BG	5 VDC	1000 mA	2.1 mm x 5.5 mm female 2 (regulated)	1.05	1.77	2.15	Beige	6'	0.2	UL, CSA	8.95	7.95	6.95	6.25	
171301	JOD48U08	5 VDC	1000 mA	2.1 mm x 5.5 mm female 2 (regulated)	3.13	2.93	2.00	Black	6'	1.0	UL, CUL	7.95	6.95	6.25	5.59	
155598	DC510F5	5 VDC	1000 mA	2.5 mm x 5.5 mm female 2	2.58	1.95	1.71	Black	7' 4"	0.7	UL, CSA	6.95	6.25	5.59	4.95	
168604	DCR510F5	5 VDC	1000 mA	2.5 mm x 5.5 mm female 2 (regulated)	3.30	2.20	1.92	Black	6'	1.2	UL, CSA	7.95	6.95	6.25	5.59	
172427	SA051A5U-1	5 VDC	1500 mA	2.5 mm x 5.5 mm female 2 (regulated)	2.93	1.96	1.61	Black	6'	0.3	UL, CSA	9.95	8.95	7.95	6.95	









100853

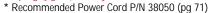


We specialize in Wall Transformers – Manufacturer may vary – call for additional OEM PRICING.

AC to DC Wall Transformers (Input: 120VAC 60Hz) All are unregulated unless specified

• Plugs into standard 2-prong 115V outlet

Can change any power plug (pg 87) on any DC wall transformer listed (100 pcs. min.)







127976

Polarity	1 +	(center	negative)	† 230VAC @ 50HZ European plug					(1)	Polarity 2 — (center positive)					
Part	Product	Output		Output Plug / Polarity		ension		Case	DC Cord	Wt.					
Number	Number	Voltage	Current	ID x OD (mm) Plug Type	Н	W	D	Color	Length (ft.)		CSA/CUL Approved			50	
161541	WA15050R	5 VDC	2500 mA	2.1 mm x 5.5 mm female 2 (regulated)	2.92	1.95	1.62	Black	6'	0.4	UL, CSA		\$13.49		
155619	DCR530F5	5 VDC	3000 mA	2.5 mm x 5.5 mm female 2 (regulated)		2.55	1.56	Black	6'	0.5	UL	19.95	17.95	16.95	
136717	RPS480305G		500 mA	Cut, strip and tin (w/ connector)		2.21	1.98	Black	6'	0.9	UL, CSA	1.95	1.75	1.49	1.25
155643	DC603F1	6 VDC	300 mA	2.1 mm x 5.5 mm female 2	2.80	2.00	1.60	Black	6'	0.2	UL	4.95	4.49	3.95	3.49
119255	DC605F11	6 VDC	500 mA	2.1 mm x 5.5 mm female 1	2.31	1.75	1.75	Black	6'	0.6	UL, CUL	4.95	4.49	3.95	3.49
101266	DC605F12★	6 VDC	500 mA	2.1 mm x 5.5 mm female 2	2.44	1.89	1.61	Black	6'	0.4	UL, CSA	4.95	4.49	3.95	3.49
15544	DC605M3★	6 VDC	500 mA	3.5 mm male 2	2.44	1.89	1.61	Black	6'	0.4	UL, CSA	4.95	4.49	3.95	3.25
147707	DC608F1	6 VDC	800 mA	2.1 mm x 5.5 mm female 2	2.33	1.98	1.62	Black	6'	0.6	UL, CSA	5.95	5.35	4.79	4.29
127511	RPS480808D	8 VDC	1000 mA	2.1 mm x 5.5 mm female 2	3.10	2.50	2.10	Black	6'	1.3	UL	6.95	6.25	5.59	4.95
134025	DC902F11★	9 VDC	200 mA	2.1 mm x 5.5 mm female 1	2.13	1.71	1.55	Black	6'	0.4	UL, CSA	4.25	3.79	3.39	2.95
100845	DC902F12★	9 VDC	200 mA	2.1 mm x 5.5 mm female 2	2.06	1.70	1.47	Black	6'	0.4	UL, CSA	4.25	3.79	3.39	2.95
170958	HKA0920EC	9 VDC	200 mA	2.1 mm x 5.5 mm fem 2 (230VAC input) [†]	2.57	1.70	1.56	Black	6'	0.5	TUV, CE	1.95	1.75	1.49	1.25
128830	DC902F5	9 VDC	200 mA	2.5 mm x 5.5 mm female 2	2.06	1.70	1.47	Black	6'	0.4	UL, CSA	4.25	3.79	3.39	2.95
100837	DIA3590	9 VDC	200 mA	3.5 mm male 2	2.57	1.75	1.55	Black	6'	0.4	UL, CSA	4.25	3.79	3.39	2.95
133891	CH93001	9 VDC	300 mA	2.1 mm x 5.5 mm female 2	2.00	1.50	1.50	Black	6'	0.4	UL, CSA	4.49	3.95	3.55	3.25
169519	KX-TCA1	9 VDC	350 mA	2.1 mm x 5.5 mm right angle female 1	2.72	1.70	1.55	Gray	6'	0.4	UL, CSA	4.49	3.95	3.55	3.25
137331	D7500-4	9 VDC	400 mA	2.1 mm x 5.5 mm right angle female 2	2.40	1.92	1.66	White	6'	0.6	UL	4.25	3.79	3.39	2.95
140636	DC904F5	9 VDC	400 mA	2.5 mm x 5.5 mm female 2	2.58	2.00	2.00	Black	6'	0.6	UL, CSA	4.49	3.95	3.55	3.25
163627	DC905F11	9 VDC	500 mA	2.1 mm x 5.5 mm female 1	2.50	1.90	1.74	Black	6'	0.6	UL, CSA	4.95	4.49	3.95	3.49
170270	PQLV1	9 VDC	500 mA	2.1 mm x 5.5 mm right angle female 1	2.68	2.05	1.68	Gray	6'	0.6	UL, CSA	3.95	3.55	3.19	2.85
100853	13-0000083*	9 VDC	500 mA	2.1 mm x 5.5 mm female 2	2.50	1.90	1.74	Black	6'	0.6	UL, CSA	4.95	4.49	3.95	3.49
147731	DC905F1BE	9 VDC	500 mA	2.1 mm x 5.5 mm female 2	2.56	1.95	1.74	Beige	6'	0.6	UL, CSA	4.95	4.49	3.95	3.49
180540	FZ1729A	9 VDC	500 mA	2.5 mm x 5.5 mm right angle female 2	2.41	1.17	1.57	Black	6'	0.4	UL, CSA	3.95	3.55	3.19	2.85
15561	DC905M3★	9 VDC	500 mA	3.5 mm male 2	2.50	1.95	1.56	Black	6'	0.5	UL, CSA	4.95	4.49	3.95	3.49
100175	DC906F5★	9 VDC	600 mA	2.5 mm x 5.5 mm female 2	2.50	1.90	1.75	Black	6'	0.6	UL, CSA	5.49	4.95	4.49	3.95
164929	48-9-900D	9 VDC	900 mA	2.1 mm x 5.5 mm female 1	2.72	2.30	1.83	Black	6'	0.9	UL, CUL	5.95	5.35	4.79	4.29
100888	48-09-1000D★	9 VDC	1000 mA	2.1 mm x 5.5 mm female 2	2.58	2.39	1.97	Black	6'	1.0	UL, CSA	5.95	5.35	4.79	4.29
127503	DC910F5	9 VDC	1000 mA	2.5 mm x 5.5 mm female 2	2.59	2.43	2.00	Black	6'	0.9	UL, CSA	5.95	5.35	4.79	4.29
15587	PAG1200★	9 VDC	1000 mA	3.5 mm male 2	2.59	2.43	2.00	Black	6'	0.9	UL, CSA	5.95	5.35	4.79	4.29
130526	500273	9 VDC	1200 mA	2.1 mm x 5.5 mm female 1	2.40	2.00	1.80	Black	6'	1.0	UL, CSA	5.95	5.35	4.79	4.29
143693	DC915F1	9 VDC	1500 mA	2.1 mm x 5.5 mm female 2	3.25	2.50	2.25	Black	6'	1.3	UL, CSA	10.95	9.95	8.95	7.95
161550	WA15090R	9 VDC	1670 mA	2.1 mm x 5.5 mm female 2 (regulated)	2.92	1.95	1.62	Black	6'	0.4	UL, CUL	13.95	12.49	11.25	9.95
163993	DC1202F11R★	12 VDC	200 mA	2.1 mm x 5.5 mm right angle female 1	2.38	1.70	1.63	Black	6'	0.4	UL, CSA	3.95	3.55	3.19	2.85
100095	DC1202F1★	12 VDC	200 mA	2.1 mm x 5.5 mm female 2	2.14	1.82	1.49	Black	6'	0.4	UL, CSA	3.95	3.55	3.19	2.85
158043	43-1008	12 VDC	200 mA	2.1 mm x 5.5 mm right angle female 2	2.19	1.65	1.50	Black	6'	0.4		3.95	3.55	3.19	2.85
149340	351202002	12 VDC	200 mA	2.5 mm x 5.5 mm female 2	2.52	1.73	1.50	Black	6'	0.4	UL, CSA	3.95	3.55	3.19	2.85
164283	HD1225	12 VDC	250 mA	Strip & tin w/ panel mount strain relief	2.18	1.69	1.49	Gray	6'	0.4	UL, CUL	1.95	1.75	1.49	1.25
163491	AD1230	12 VDC	300 mA	Just cut, strip & tin	2.19	2.16	1.59	Black	6'	0.5	UL, CSA	3.49	2.95	2.79	2.49
127976	DC1203F12	12 VDC	300 mA	2.1 mm x 5.5 mm female 2	2.60	1.80	1.60	Black	6'	0.7	UL, CSA	4.49	3.95	3.55	3.25





DC Wall Transformers 90





15392



AC to DC Wall Transformers (Input: 120VAC 60Hz)

All are unregulated unless specified
• Plugs into standard 2-prong 115V outlet
Can change any power plug (page 87) on any DC wall transformer listed (100 pcs. min.)





102285

Polarity	1 +	(center	negative)	Δ = 3-prong input			Polarity 2 — + (center positive)								
Part Number	Product Number	Output Voltage	Rating Current	Output Plug / Polarity ID x OD (mm) Plug Type	Dime H	ensions W	s (in.) D	Case Color	DC Cord Length (ft.)	Wt. (lbs.)	UL Listed CSA/CUL Approved	1	Prio 10	ing 50	100
163504	AD120CP	12 VDC	300 mA	2.1 mm x 5.5 mm female 2	2.19	2.13	1.59	Beige	6'	0.6	UL, CSA	\$3.95	\$3.55	\$3.19	\$2.85
169130	LSA1974ADT	12 VDC	300 mA	2.5 mm x 5.5 mm female 1	2.60	1.95	1.76	Beige	6'	0.5	UL, CSA	1.95	1.75	1.49	1.25
147926	AD212	12 VDC	400 mA	2.1 mm x 5.5 mm female 2	2.59	1.96	1.67	Black	6'	0.5	UL, CSA	4.49	3.95	3.55	3.19
114825	DC1205ST	12 VDC	500 mA	Cut, stripped and tinned	2.52	2.02	1.65	Black	6'	0.6	CUL	4.25	3.79	3.39	2.95
15368	DC1205F11★	12 VDC	500 mA	2.1 mm x 5.5 mm female 1	2.50	1.90	1.57	Black	6'	0.6	UL, CSA	4.95	4.49	3.95	3.49
170296	KXA11	12 VDC	500 mA	2.1 mm x 5.5 mm right angle female 1	2.58	1.99	1.65	Dark Gray	6'	0.6	UL, CSA	4.95	4.49	3.95	3.49
102496	DC1205F12★	12 VDC	500 mA	2.1 mm x 5.5 mm female 2	2.50	1.90	1.57	Black	6'	0.6	UL, CSA	4.95	4.49	3.95	3.49
131300	SCP41	12 VDC	500 mA	2.1 mm x 5.5 mm right angle female 2	2.60	1.90	1.74	Beige	6'	0.6	UL, CSA	4.95	4.49	3.95	3.49
162996	DCR1205F12	12 VDC	500 mA	2.1 mm x 5.5 mm female 2 (regulated)	3.17	2.20	1.91	Black	6'	0.9		7.95	6.95	6.25	5.59
102277	DC1205F5★	12 VDC	500 mA	2.5 mm x 5.5 mm female 2	2.50	2.08	1.68	Black	6'	0.6	UL, CSA	4.95	4.49	3.95	3.49
17267	DC1205M3★	12 VDC	500 mA	3.5 mm male 2	2.50	1.90	1.57	Black	6'	0.6	UL, CSA	4.95	4.49	3.95	3.49
117479	DC1208F1★	12 VDC	800 mA	2.1 mm x 5.5 mm female 2	2.99	2.28	1.95	Black	6'	0.9	UL, CSA	6.49	5.79	5.25	4.75
181711	48D12800B	12 VDC	800 mA	2.1 mm x 5.5 mm fem 2 (240 VAC input)†	3.18	2.17	2.18	Black	6'	1.1	CE, TUV	5.95	5.35	4.79	4.29
129331	48-12-800	12 VDC	800 mA	2.5 mm x 5.5 mm female 2	2.99	2.28	1.95	Black	6'	0.9	UL, CSA	6.49	5.79	5.25	4.75
121232	AW10D1GA	12 VDC	800 mA	3.5 mm male 2	2.57	2.40	1.95	Black	6'	0.9	UL, CSA	6.49	5.79	5.25	4.75
100870	DC1210F1★	12 VDC	1000 mA	2.1 mm x 5.5 mm female 2	2.58	2.39	1.97	Black	6'	0.9	UL, CSA	7.49	6.75	5.95	5.49
170245	DCR1210F12	12 VDC	1000 mA	2.1 mm x 5.5 mm female 2 (regulated)	3.20	2.26	1.97	Black	6'	1.2		10.95	9.95	8.95	7.95
105478	DC1210F5★	12 VDC	1000 mA	2.5 mm x 5.5 mm female 2	2.58	2.39	1.97	Black	6'	1.0	UL, CSA	7.49	6.75	5.95	5.49
15392	DC1210M3★	12 VDC	1000 mA	3.5 mm male 2	2.58	2.39	1.97	Black	6'	1.0	UL, CSA	7.49	6.75	5.95	5.49
161533	WA15-120R	12 VDC	1250 mA	2.1 mm x 5.5 mm female 2 (regulated)	2.92	1.95	1.62	Black	6'	0.4	UL, CSA	13.95	12.49	11.25	9.95
183433	WA15-12P2L	12 VDC	1250 mA	2.5 mm x 5.5 mm female 2 (regulated)	1.60	1.90	2.90	Black	6'	0.4	UL, CUL	13.95	12.49	11.25	9.95
168858	SA4838A	12 VDC	1300 mA	2.5 mm x 5.5 mm female 2	3.20	2.25	1.85	Black	6'	1.2	UL, CUL	8.95	7.95	6.95	6.25
136881	DC1215F1	12 VDC	1500 mA	2.1 mm x 5.5 mm female 2	3.40	2.70	2.20	Black	6'	1.5		10.95	9.95	8.95	7.95
101291	DC1215F5★	12 VDC	1500 mA	2.5 mm x 5.5 mm female 2	3.40	2.70	2.20	Black	6'	1.5		10.95	9.95	8.95	7.95
173198	TAACA0011	12 VDC	2500 mA	2.1 mm x 5.5 mm female 2 (regulated)	3.20	2.20	1.30	Gray	6'	0.5	UL, CSA, CE	14.95	13.49	11.95	9.95
129314	DV-1250★	14 VDC	360 mA	2.5 mm x 5.5 mm right angle female 2	2.34	1.98	1.60	Black	6'	0.6	UL, CSA	3.95	3.55	3.19	2.85
123932	DC1407F1★	14 VDC	700 mA	2.1 mm x 5.5 mm female 2	2.58	2.39	1.97	Black	6'	1.0	UL, CSA	6.95	6.25	5.59	4.95
170253	AEC4814B	14 VDC	730 mA	2.1 mm x 5.5 mm female 2 Δ	2.79	1.80	1.49	Black	6'	1.1	UL, CSA	1.95	1.75	1.49	1.25
153779	D6-10-06	15 VDC	300 mA	2.5 mm x 5.5 mm female 2	2.44	1.90	1.60	Black	9'	0.7	UL, CSA	4.95	4.49	3.95	3.49
155803	A41506	15 VDC	600 mA	2.1 mm x 5.5 mm female 1	2.78	2.33	1.81	Black	6'	1.0	UL, CSA	4.95	4.49	3.95	3.49
181702	48D15800	15 VDC	800 mA	Stripped and tinned	3.23	2.25	1.98	Black	6'	1.0	UL, CSA	5.95	5.35	4.79	4.35
163782	481509003C0	15 VDC	900 mA	2.1 mm x 5.5 mm female 2	2.50	2.21	1.92	Black	6'	0.8	UL, CSA	7.95	6.95	6.25	5.59
151992	AD-SS-2	15 VDC	1000 mA	2.1 mm x 5.5 mm female 1	3.72	2.56	2.17	Beige	6'	1.5	UL, CSA	7.95	6.95	6.25	5.59
169391	WA15-150	15 VDC	1000 mA	2.1 mm x 5.5mm female 2 (regulated)	2.90	1.90	1.60	Black	6'	0.5	UL, CUL	13.95	12.49	11.25	9.95
162317	DC1605F1	16 VDC	500 mA	2.1 mm x 5.5 mm female 2	2.23	2.35	1.90	Black	6'	0.8	UL, CSA	6.95	6.25	5.59	4.95
181729	CXV18250	18 VDC	250 mA	2.1 mm x 5.5 mm female 2	2.61	2.04	1.60	Black	6'	0.6	UL	4.95	4.49	3.95	3.49
	DC1805F1	18 VDC	500 mA	2.1 mm x 5.5 mm female 2	2.52	2.23	1.94	Black	6'	0.8	UL, CSA	7.95	6.95	6.25	5.59
	KWM020188		1000 mA			1.94		Black	6'	0.4	UL, CUL	14.95	13.49	11.95	10.95
	DC2404F1★	24 VDC	400 mA	2.1 mm x 5.5 mm female 2	3.00		2.00	Black	6'	0.9	UL, CUL	6.95	6.25	5.59	4.95
	DC2405F11	24 VDC	500 mA	2.1 mm x 5.5 mm female 1	3.12		1.90	Black	6'	1.0	UL, CUL	6.95	6.25	5.59	4.95
	DCR2405F12	24 VDC	500 mA	2.1 mm x 5.5 mm female 2 (regulated)		2.68		Black	6'	1.3		8.95	7.95	6.95	6.25
	DCR2405F52	24 VDC	500 mA	2.5 mm x 5.5 mm female 2 (regulated)	3.35	2.68	2.16	Black	6'	1.3		8.95	7.95	6.95	6.25
	DC2405M3	24 VDC	500 mA	3.5 mm male 2	3.12		1.90	Black	6'	1.0	UL, CUL	6.95	6.25	5.59	4.95
	BC2424HP	24 VDC	750 mA	2.1 mm x 5.5 mm female 2	3.34		2.20	Beige	6'	1.0	UL, CSA	7.95	6.95	6.25	5.59
	DC2408F1	24 VDC	800 mA	2.1 mm x 5.5 mm female 2	2.91	1.94	1.62	Black	6'	0.4	UL, CUL, TUV	8.95	7.95	6.95	6.25
	DC2412F11	24 VDC	1200 mA	2.1 mm x 5.5 mm female 1	3.84	3.01	2.56	Black	6'	2.0		11.95	10.95	9.95	8.95
	DC2412F5★	24 VDC	1200 mA	2.5 mm x 5.5 mm female 2	3.84	3.01	2.56	Black	6'	2.0		11.95	10.95	9.95	8.95
	DC2412M3	24 VDC	1200 mA	3.5 mm male 2	3.37	2.70	2.22	Black	6'	2.0		11.95	10.95	9.95	8.95
160258	13A3546	30 VDC	500 mA	2.5 mm x 5.5 mm female 2	3.62	2.45	2.04	Black	6'	1.5	UL, CSA	6.95	6.25	5.59	4.95
15309	DCM05★	3, 4.5, 6,	500 mA	1.35 x 3.5, 2.1 x 5.0, 2.5 x 5.5 female											
		7.5, 9, 12VDC		2.5, 3.5 male, 9V battery snap	2.98	2.15	2.10	Black	6'	0.7	UL, CSA	7.95	6.95	6.25	5.59
123158	DCM10	1.5, 3, 4.5, 6,	1000 mA	1.35 x 3.5, 2.1 x 5.0, 2.5 x 5.5 female											
		7.5, 9, 12VDC		2.5, 3.5 male , 9V battery snap	3.71	2.22	2.50	Black	6'	0.9	120 or 220VAC	8.95	7.95	6.95	6.25





3-60 Watt Table-Top Power Supplies

- · Manufacturer may vary
- · Regulated and nonregulated outputs
- Input voltage: 100-240VAC @ 50/60Hz
- P/N 173593: with on/off switch
- P/N 176348/176604: 120VAC input; 5A @ 250V fuse

Polarity 1 + (center negative) Polarity 2 (center positive)

- * Requires power cord P/N 38050 or 38041 (below)
- † 120VAC input
- # 120VAC input; 5A @ 250V fuse









*38050 (black)

38641 (beige) 6' power cord







136565

155213 155230 139096 155221

				•			1	155213	1	155230		139096		15522	<u>'</u> 1
Part	Product	Voltage		Wattage	Output Plug/Polarity	_	Power	0.1	Size	DC/AC	Wt.	Agency	4	Pricing	
Number	Number	(VDC)	Current	(W)	ID x OD Plug Type	Reg.	Indicator	Color	L" x W" x H"	Cord	(lbs.)	Approvals	1	10	50
176348	LTCA054#	14VAC	4.0A	56W	2.1mm x 5.5mm female 1	No	No	Black		5'8"/ 5'8'		UL,CUL	\$9.95	\$8.95	\$7.95
176604	TA661640#	16VAC	4.0A	64W	2.1mm x 5.5mm female 1	No	No	Black	3.7 x 2.9 x 2.5	6'/ 6'	2.8	CSA	9.95	8.95	7.95
152135	100380-001†	24VAC	1.46A	35W	2.1mm x 5.5mm female 1	No	No	Black	3.6 x 2.7 x 2.1	3'5"/ 5'6'	1.9	UL,CSA	9.95	8.95	7.95
161568	MA15-050R	5VDC	2.5A	15W	2.1mm x 5.5mm female 2	Yes	No	Black	3.3 x 2.0 x 1.3	4.0'	0.4	UL,CSA,TUV	19.95	17.95	15.95
172443	PSA30U050*	5VDC	4.0A	20W	2.1mm x 5.5mm female 2	Yes	No	Black	4.4 x 2.4 x 1.4	3.5'	0.5	UL,CSA,TUV,CE	19.95	17.95	15.95
172777	AD740U*	5VDC	4.0A	20W	2.1mm x 5.5mm female 2	Yes	Yes	Black	4.1 x 2.6 x 1.6	4.0'	1.4	UL,CUL,TUV,CE	19.95	17.95	15.95
155205	KA52A	5VDC	4.0A	20W	2.1mm x 5.5mm female 2	Yes	No	Black	4.1 x 2.6 x 1.6	6.0'	1.2	UL,CSA,TUV	29.95	26.95	23.95
169121	AD740U1050*	5VDC	4.0A	20W	2.5mm x 5.5mm female 2	Yes	Yes	Black	4.1 x 2.6 x 1.6	4.0'	1.4	UL,CUL,TUV	19.95	17.95	15.95
170341	UP02511091*	9VDC	0.3A	3W	2.1mm x 5.5mm female 2	Yes	No	Black	4.3 x 2.7 x 1.5	6.0'	0.6	UL,CSA,TUV	8.95	7.95	6.95
173577	UPS20109P*	9VDC	2.3A	21W	2.5mm x 5.5mm female 2	Yes	Yes	Beige	5.7 x 2.9 x 1.7	4' 2"	0.9	UL,CSA,TUV	19.95	17.95	15.95
136565	DDC1210P†	12VDC	1.0A	12W	Stripped & Tinned	No	No	Black	3.2 x 2.2 x 1.9	6'/6'	1.2	_	9.95	8.95	7.95
161576	MA15-120R	12VDC	1.25A	15W	2.1mm x 5.5mm female 2	Yes	No	Black	3.3 x 2.0 x 1.3	4.0'	0.4	UL,CSA,TUV	22.95	19.95	17.95
140880	DC1215ST†	12VDC	1.5A	18W	Stripped & Tinned	No	No	Black	3.1 x 2.1 x 1.9	6'/6'	1.5	_	9.95	8.95	7.95
183054	SPU24-3*	12VDC	1.5A	18W	2.1mm x 5.5mm female 2	Yes	Yes	Black	4.2 x 2.6 x 1.2	6.0'	0.5	UL,CUL,TUV,CE	23.95	21.49	18.95
157956	PS571812D†	12VDC	1.5A	18W	2.5mm x 5.5mm female 2	No	No	Black	3.4 x 2.7 x 2.2	6'/6'	2.0	UL	12.95	11.49	9.95
143714	DC1220F1†	12VDC	2.0A	24W	2.1mm x 5.5mm female 2	No	No	Black	3.8 x 2.8 x 2.3	6'/6'	2.2	_	14.95	13.49	11.95
143722	DC1220F5†	12VDC	2.0A	24W	2.5mm x 5.5mm female 2	No	No	Black	3.8 x 2.8 x 2.3	6'/6'	2.2	_	14.95	13.49	11.95
143731	DC1220M3†	12VDC	2.0A	24W	3.5mm male 2	No	No	Black	3.8 x 2.8 x 2.3	6'/6'	1.9	_	14.95	13.49	11.95
155213	A42A112MP	12VDC	3.3A	40W	2.1mm x 5.5mm female 2	Yes	Yes	Black	5.5 x 2.3 x 1.5	1.6'	0.7	UL,CUL,TUV	29.95	26.95	23.95
155230	SPU50-3	12VDC	5.0A	60W	2.1mm x 5.5mm female 2	Yes	Yes	Black	5.6 x 2.9 x 1.5	6.0'	1.3	UL,CSA,TUV	44.95	39.95	34.95
173585	UPS20115P*	15VDC	1.4A	21W	2.5mm x 5.5mm female 1	Yes	Yes	Beige	5.8 x 2.9 x 1.7	4' 2"	0.9	UL,CSA,TUV	9.95	8.95	7.95
173593	UPS30215P*	15VDC	1.5A	30W	2.5mm x 5.5mm female 2	Yes	No	Black	6.8 x 4.3 x 2.2	6.0'	1.2	UL,CSA,TUV	19.95	17.95	15.95
174975		15VDC	1.6A	22W	2.1mm x 5.5mm female 2	Yes	Yes	Black	4.1 x 2.5 x 1.2	6.0'	0.6	UL,CSA,TUV,CE	29.95	26.95	23.95
174983	SPU41-5	18VDC	2.2A	40W	2.1mm x 5.5mm female 2	Yes	Yes	Black	5.6 x 2.9 x 1.6	6.0'	1.1	UL,CUL,TUV,CE	39.95	35.95	32.95
169076	808050-001*	20VDC	2.5A	50W	2.5mm x 5.5mm female 2	Yes	Yes	Black	6.7 x 3.3 x 2.3	6.0'	1.4	UL,CSA,TUV	19.95	17.95	14.95
174844	DCR2410F12†	24VDC	1.0A	24W	2.1mm x 5.5mm female 2	Yes	No	Black	4.4 x 3.0 x 2.5	6'/6'	2.6	_	14.95	13.49	11.95
174852	DCR2410F52†	24VDC	1.0A	24W	2.5mm x 5.5mm female 2	Yes	No	Black	4.4 x 3.0 x 2.5	6'/6'	2.7	_	14.95	13.49	11.95
139096	DC2412F1†	24VDC	1.2A	29W	2.1mm x 5.5mm female 2	No	No	Black	4.4 x 3.1 x 2.6	6'/6'	2.5	_	19.95	17.95	15.95
181884	P40A6P2J	24VDC	1.66A	40W	2.1mm x 5.5mm female 2	Yes	Yes	Black	4.1 x 2.6 x 1.4	6.0'	0.7	UL,TUV,CE	29.95	26.95	23.95
155221	A42A124MP	24VDC	1.8A	43W	2.1mm x 5.5mm female 2	Yes	Yes	Black		1.5'	0.7	UL,CSA,TUV	29.95	26.95	23.95
161605	SPU50-6	24VDC	2.5A	60W	2.1mm x 5.5mm female 2	Yes	Yes		5.6 x 2.9 x 1.6	6.0'	1.3	UL,CSA,TUV	49.95	44.95	39.95
173665	DND-3005	30VDC	0.5A	15W	2.5mm x 5.5mm female 2	Yes	No	Black	8.3 x 2.5 x 2.2	5'9"/3'2"	1.4	UL,CUL	9.95	8.95	7.95
	SPU50-9	48VDC	1.25A	50W	2.1mm x 5.5mm female 2	Yes	Yes	Black		6.0'	1.3	UL,CSA,TUV	49.95	44.95	39.95
172004	JI UUU-7	40100	1.25A	JUVV	Z. IIIIII X S.SIIIII IEHIAIE Z	162	162	DIACK	J.U A Z.7 A I./	0.0	1.3	UL,USH,TUV	47.70	44.73	37.73

JAMECO Table Top Power Cords (see page 72 for International Power Cords)

	, and the property of the prop										
Part	Product				Cord	Cord	Weight	Agency		Pricing	
Number	Number	Description	Color	AWG	Type	Length	(lbs.)	Approvals	1	10	100
38041	17249	3-conductor detachable power supply cord	Beige	18/3	SVT	6'	0.4	UL,CSA	\$3.25	\$2.75	\$2.25
38050	17250	3-conductor detachable power supply cord	Black	18/3	SVT	6'	0.4	UL,CSA	3.75	3.25	2.75

Mean Well is an ISO-9002 Certified Company See pages 97-98 for more Mean Well Power Supplies





AC/AC and AC/DC Wall Mount Power Supplies

16VAC@2.5A

40 Watt AC/AC Wall Transformer

- · Input voltage:
- 120VAC @ 60Hz · Output voltage:
- 16VAC @ 2.5A (center tap)
- Input connector: standard 3-prong input
- Output connector: 6' cable with 5-pin DIN male connector
- Size: 3.3"H x 2.7"W x 2.2"D
- · Weight: 1.8lbs.

Part No. Product No. 50 15784903BF....\$6.95 \$6.25 \$5.59 \$4.95 149551

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- Product Information and **Photographs**
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On-Tech 5.4 Watt Linear Wall Transformer (Australia)

- Input voltage: 240VAC @ 50Hz
- Output voltage: 9VDC @ 600mA
- Input connector: Australian type 2-prong connector
- Output connector: 2.5mm x 5.5mm female center positive with 6' cord
- Size: 2.88"H x 2.16"W x 1.53"D

Weight: 0.8 lbs. • Color: Black Part No. Product No.

172654 B9-410313.

Polarity \bigcirc — \bigcirc (center positive)

UL/CSA listed

ĬŎ

50

.....\$4.95 \$4.49 \$3.95 \$3.49

Motorola 5.6 Watt Linear Wall DC **Power Supply**

Regulated Wall Transformer

- Input voltage: 120VAC @ 60Hz Output voltage:
- +5VDC @ 500mA, +12VDC @ 130mA, 12VDC
- -12VDC @ 130mA
- Input connector: standard 3 prong AC wall connector
- Output connector: 6' cord with 8-pin mini DIN connector
- Size: 2.9"L x 2.6"W x 1.9"H
- · Weight: 1.2 lbs. Part No. Product No.

154624 5712-305-4C3E....\$7.95 \$6.95 \$6.25 \$4.95

TCE 10.2 Watt Regulated DC Wall Power Supply

- Input voltage: 120VAC @ 60Hz
- Output voltage: +12VDC @ 850mA · Input connector: standard
- 3-prong AC wall connector Output connector: 3-pin 0.156" center housing (P/N 104432, pg 61); 6' cable • Mating output connector: +12 Ground N/C

(3-pin male 0.156" center lock headers) • Size: 4.7"L x 3.1"W x 2.2"H • Weight: 1.7 lbs.

Part No. Product No. **163387** TL1102**\$9.95** \$8.95

Potrans 12 Watt DC Wall **Power Supply Dual Output**

- Input voltage: 120VAC @ 60Hz
- Output volt.:
- +9VDC @ 1A;
- -9VDC @ 0.3A Output connector: 3-pin male (1) 9VDC @

DC Power Supply

Output voltage:

+5VDC @ 1.0A

+12VDC @ 0.3A,

• Input voltage: 120VAC @ 60Hz

- mini DIN plug with 10' cable Input connector: 2-prong input plug
- Mating output connector: recommended P/N 155061 (pg 64) • Size: 3.2"L x 2.2"W x 1.9"D • Wt: 1.2 lbs. 1 10 50

Part No. Product No. **171088** WP481218D \$4.95 \$4.49 \$3.95

Globtek 12.2 Watt Linear Table-Top

AC/AC and AC/DC Table-Top Power Supplies

Jameco 13.5 Watt Table-Top AC Power Transformer

Center Tap

- Input voltage: 120VAC @ 60Hz
- Output voltage: 18VACT@750mA
- Input connector: 2-prong plug with 6' cable

· Output voltage:

24VAC @ 700mA

Part No. Product No.

Power Supply

· Output connector:

Part No. Product No.

- · Output connector: 4-pin mini DIN connector with 5'6" cable
- Size: 3.4"L x 2.6"W x 2.1"H

AULT 16.8 Watt AC

Table-Top Transformer • Input voltage: 127VAC @ 60Hz

· Input connector: standard 2-prong

AC wall (plug) connector, 6' long

· Output connector: 3-pin .156"

center housing (P/N 104432

pg 61), 6' cordUL listed

• Input voltage: 115VAC @ 60Hz

· Output voltage: +5VDC @ 1.0A

· Input connector: 6' 2-wire

cord with 115VAC plug

6' wire with 7-pin DIN

· No minimum load required

• Size: 3.4"L x 2.7"W x 2.3"H

147310 0931RB**\$4.95**

• Size: 3.1"L x 2.1"W x 1.9"H • Weight: 1.1 lbs.

Atari 5 Watt Linear Table-Top DC

UL approved i • Weight: 1.6 lbs. Pins 3, 5 & 7 = GND

116089 CO70042......\$6.95 \$6.25 \$5.59

Fnd View

(Male)

· Weight: 2.2 lbs. · UL approved

Part No. Product No. 174220 PS571418CG....\$6.95 \$6.25 \$5.59 \$4.95

Atari 6.1 Watt Linear Table-Top DC Power Supply

Input voltage: 117VAC @ 60Hz

- Output voltage: +5VDC @ 720mA, +12VDC @ 210mA
- Input connector: standard 2-prong AC wall connector, 6' long • UL/CSA listed Output connector: 5' cord with
- 5-pin DIN female connector

Size: 4.8"L x 3.3"W x 3.2"H • Wt.: 2.6 lbs.

Product No. 10 **147467** PS32**\$3.95** \$3.55

LEXMARK 7.5 Watt Linear Table-Top DC Power Supply

- · Input voltage: 115~120VAC 60Hz @ 275mA
- · Output voltage: +5VDC @ 1.5A • Input conn.: 6'2" 2-prong plug
- Output connector: 8' cord with
- 3-pin molex type connector Min. load: 10% of rated load
- Size: 5.5"L x 2.5"W x 2.2"H Weight: 2.1 lbs. Part No. Product No.

7202C3.....**\$6.95** \$6.25 Jameco 9 Watt Linear Table-Top

DC Power Supply Input volt.:120VAC @ 50/60Hz

- Output voltage: +5VDC @ 0.6A,
 - +12VDC @ 0.25A, -12VDC @ 0.25A
 - Input connector: grounded 120VAC plug, 70" cord
- Mating output connector: P/N 15843 or 29399 (pg 64) • No minimum load required Size: 4.8"L x 3.1"W x 2.5"H • Wt: 2.3 lbs.

Part No. Product No. 103173 JE9100......\$19.95 \$17.95 \$15.95

-12VDC @ 0.3A Input connector: grounded 120VAC plug with 6' cord

Output connector: 8-pin mini DIN w/ 6' cord • Size: 4.5"L x 3.0"W x 2.5"H • Wt.: 2.6 lbs.

Part No. Product No. 10 155651 TR2V100MD8......\$17.95

Keltron 15.2 Watt Linear Table-Top **DC Power Supply**

- Input voltage: 115VAC @ 60Hz Output voltage: +5VDC @ 2.OA,
- +26VDC @ 0.2A Protected by 0.5A fuse
- · Input connector: 3 pronged 6' power cord
- Output connector: female molex 3 conductor, 3.5' cord UL approved Min. load: all outputs at 10% of rated load
- Size: 7.0"L x 4.9"W x 2.5"H Weight: 3.1 lbs.

Part No. Product No. .\$4.95 \$4.49 107326 MPC2S62 ...

Gatron 3.75 Watt Regulated DC Table-Top Power Supply

- Input voltage: 120VAC @ 60Hz Output voltage: +5VDC @ 750mA
- Input connector: standard 3-prong with 5'9" cord
- Output connector: 4-pin male mini DIN with 5'9" cord Recommend 4-pin female mini (1) +5VDC (O

DIN PC mount connector (P/N 140791 pg 64) • Size: 4.1"L x 2.5"W x 2.0"H • Wt.: 1.5 lbs.

Part No. Product No. 163969 140791 MDR4S (connector)..... .54



+8VDC @ 600mA (orange)

-8VDC @ 200mA (yellow)

1+3.3VDC @ 3A (red)

Ground (black)

Skynet 8 Watt Table-Top DC Power Supply

- Input volt.: 115/230 @ 50/60Hz
- · Output voltage: +5VDC @ 1.5A, -5VDC @ 0.1A
- · Input connector: 3 prong input power plug
- · Output connector: 6' cord with 5-pin DIN male connector
- · Mating input connector: P/N 38050 (pg 71)
- Mating output connector: P/N 15843 (pg64)
- Size: 5.5"L x 2.9"W x 1.5"H Weight: 1.1 lbs. Part No. Product No. 10

100 153752 LVT-T022.......\$9.95 8.95 \$7.95 \$6.95

Condor International 12 Watt Table-Top DC Power Supply

- · Input voltage: 230VAC @ 50Hz
- · Output voltage: +12VDC @ 1A
- · Input connector: 3-prong female connector with 6.5" cable
- · Mating input connector: recommend P/N 38050 (3-conductor detachable power
- cord, pg 71 or International power cords, pg 72)

Polarity

- · Output connector: 2.1mm x 5.5mm center positive female connector · CE/TUV approved
- Size: 3.2"L x 2.2"W x 1.9"H · Weight: 1.1 lbs. Part No. Product No. 10 175450 PSDG121A-230\$6.95 \$6.25 \$5.95

Mean Well 17 Watt Table-Top DC Power Supply

- · Input voltage: 100/250VAC @ 50-60Hz · Output voltage:
- +5VDC @ 1.0A,
- +12VDC @ 0.5A. -12VDC @ 0.5A
- · Output connector: male 5-pin
- DIN connector with 5' long cable Pin 3 +5VDC · Mating output connector:
- P/N 15843 (pg 64) · CSA/CE/TUV approved
- Size: 4.0"L x 2.5"W x 1.5"H Weight: 1.0 lb.

Part No.	Product No.	1	10	25
159353	KA60A	\$37.95	\$33.95	\$29.95

Hewlett Packard 12 Watt Table-Top DC Power Supply

India & South Africa Version

- · Input voltage: 220VAC @ 50Hz
- · Output voltage: +30VDC @ 0.4A
- · Input connector: 3-prong power plug with 3' cable (BS546 type power plug
 - Polarity + India & South Africa version)
- · Output connector: 2.5mm x 6.5mm female center negative with 6' cord
- Size: 3.5"L x 2.7"W x 2.1"H Weight: 1.7 lbs.

Part No.	Product No.	1	10	50	100	
172216	C2180A	\$8.95	\$7.95	\$6.95	\$5.95	

AULT 21.1 Watt Table-Top Regulated Mean Well 40.6 Watt Table-Top DC Power Supply

- Input voltage: 100/250VAC @ 50/60Hz
- Output voltage: +5VDC @ 1.1A, +12VDC @ 1.3A

(I) (I) (A)



- Input conn.: 3-prong input power plug
- Mating input connector: P/N 38050
- Output connector: 6' cable with 4-pin mini DIN male connector
- Mating output connector: P/N 140791
- Size: 4.1"L x 2.5"W x 1.5"H Weight.: 0.9 lbs.

Part No. Product No. 171627 SC222TA\$19.95 \$17.95 \$15.95 \$13.95

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Potrans 23 Watt Table-Top Regulated DC Power Supply

- · Input voltage: 100/250VAC @ 50/60Hz
- Output voltage: +5VDC @ 2A, +24VDC @ 0.5A, -5VDC @ 0.2A
- · Input connector: 3-prong input power plug · Mating input connector: 3-conductor detachable power cord (recommended
- P/N 38041 pg 71) UL/CSA/TUV approved · Minimum load: 1 amp on 5VDC output
- · Output conn.: 5-pin mini DIN male with 3'8" cord
- Size: 4.2"L x 2.6"W x 1.5"H Weight: 1.0 lb.

Part No. Product No. 171070 UPO2513060\$12.95 \$11.49 \$9.95

AULT 25 Watt Regulated DC **Table-Top Power Supply**

- · Input voltage: 100/250VAC@50/60Hz
- Output voltage: +9VDC @ 2.78A
- Input connector: 3-prong input connector
- · Mating input connector: recommend P/N 38050 (pg 71)
- Output connector: 5'8" cord w/ 3-pin Molex type connector
- · CE/CSA/UL/TUV approved
- Color: black
- Size: 5.0"L x 3.0"W x 1.5"H Weight: 1.3 lbs

Product No. Part No. \$9.95 SW109.....**\$12.95 \$11.49**

Reg. DC Power Supply

- Input voltage: 100/240VAC @ 47-63Hz
- Output voltage: +5VDC @ 5A. +12VDC @ 1A. -12VDC @ 0.3A
- Output connector: 4' cable with 5-pin mini DIN male connector
- · Includes 6' AC cord
- · Mating output connector: 5-pin DIN female connector P/N 15843 (pg 64) UL/CE/TUV approved
- Size: 5.5"L x 3.0"W x 1.6"H · Weight: 1.3 lbs.

Part No. Product No. 155053 SPU41-13D-1.......\$44.95 \$39.95 \$34.95

ARTESYN 16.3 Watt Switching DC Power Supply

- · Input voltage: 115VAC @ 60Hz
- · Output voltage: +3.3VDC @ 3.0A, +8VDC @ 0.6A. -8VDC @ 0.2A
- Input connector: 3-prong power plug Output connector:
- 6-position 0.156" female housing connector
- 2A@250V fuse
- · Minimum load: all outputs at 10% of rated load
- UL/CSA approved
- Size: 5.5"L x 3.0"W x 1.1"H Weight: 0.4 lbs.

Part No. Product No. 185244 NAL20-1130\$7.95 \$6.95 \$6.25 \$5.95

TDK 19.4 Watt Switching DC **Power Supply** · Input voltage:

- 100/15VAC @ 50/60Hz Output voltage:
- +5VDC @ 1.0A +12VDC @ 1.2A
- · Input connector: 3-pin .156" center housing connector
- Output connector: 4-pin male locking header UL approved
- Minimum load: all outputs at 10% of rated load
- Size: 4.8"L x 3.0"W x 1.3"H Weight: 0.4 lbs.

Part No. Product No. 146991 A530... .\$7.95 \$6.95

Potrans Switching DC Power Supplies

- Input voltage: 90/250VAC @ 50/60Hz
- · Mating input connector: P/N 104432 (.156" housing connector, pg 61)
- Mating output connector: P/N 104731 (.156" housing connector, pg 61)
- Fused (2A @ 250VAC)
- · Minimum load: all outputs at 10% of rated load UL/CSA/TUV approved
- +18V @ 0.7A +18V @ 0.7A 170149

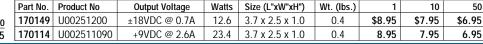












94 Power Supplies





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Power Supplies

Digital Power 88 Watt Switching DC Power Supply **710**

· Input voltage: 99VAC/250VAC @ 47-63Hz

· Output voltage: +5VDC @ 8A, +12VDC @ 3A,

-12VDC @ 1A • Input connector: 5-position 0.156" male locking headers

· Mating input connector: recommend P/N 104723 (pg 61)

· Output connector: 14-poistion 0.156' male locking headers

· Minimum load: all outputs at 10% of rated load • UL/CUL/TUV approved

• Size: 5.0"L x 3.4"W x 1.5"H · Weight: 0.9 lbs. Part No.

Product No. **181180** USC100-311...... \$19.95 \$17.95

Digital Power 90 Watt Switching DC Power Supply

Requires 30CFM air cooling

· Input voltage: 90-250VAC @ 47-63Hz · Output voltage:

+3.3VDC @ 6A, +5VDC @ 12A +12VDC @ 0.8A

· Input connectors: 0.156" Molex type male headers (14-pin) • Output connectors: 0.156" Molex

type male headers (5-pin) · Recommend fan: P/N 102904

(pg 100) - 115VAC, 31 CFM

 Auto switching input
 UL/CSA/TUV approved · Minimum load: all outputs at 10% of rated load

• Size: 6.0"L x 3.2"W x 1.0"H • Weight: 1.0 lb.

Part No. Product No. .\$12.95 \$11.49 \$9.95 **157913** US100-313.....

ARTESYN 103 Watt Switching **DC Power Supply**

Quad Output

· Input voltage: 100VAC/240VAC @ 50/60Hz

· Output voltage:

+5.1VDC @ 8A, +12VDC @ 4.5A -5VDC @ 500mA, -12VDC @ 500mA

· Input connector: 5-position 0.156" male locking headers · Mating input connector:

recommend P/N 104803 (pg 61) · Output connector: 13-position 0.156" male locking headers

· Minimum load: all outputs at 10% of rated load UL/CSA/CE/VDE approved • 5A @ 250V fuse

• Size: 7.0"L x 4.2"W x 1.8"H · Weight: 1.3 lbs. Product No.

181198 NFS110-7601P.....**\$19.95** \$17.95 **EOS 130 Watt Switching** DC Power Supply

· Input voltage: 100-240VAC @ 50-60Hz

Output voltage: +15VDC @ 8.7A

Input connector: 3-position 0.156" male headers

Mating input connector: recommend P/N 104432 (pg 61)

Output connector: 6-position 0.197" screw-down terminal block side entry

3.5A @ 240VAC fused

· Minimum load: all outputs at 10% of rated load

UL/CUL/CE/VDE approved

 Size: 5.0"L x 3.0"W x 0.8"H · Weight: 0.6 lbs.

Part No. Product No. 183193 VLT130-1002. \$49.95 \$44.95

=

Ground

+15VDC @ 8.7A

+15VDC @ 8.7A

Ground

Power One 135 Watt Switching DC Power Supply

· Input voltage: 85/250VAC @ 50/60Hz

 On-board 5A @ 250VAC fuse · Output voltage:

+3.3VDC @ 30A, +12VDC @ 3A

· Output: 135 watts max. · Input connector: 5-pos. 0.156" male header

· Mating input connector: P/N 104723 (pg 61)

· Output connector: 12-position Molex type 0.156" housing connector

· Mating output connector: 12-position 0.156" male header • On-board 5A @ 250VAC fuse

· Minimum load: all outputs at 10% of rated load

Size: 8.1"L x 4.2"W x 1.5"H • Weight: 1.9 lbs.

Part No. Product No. 171686 MPU1503300S240\$12.95 \$11.49

Cherokee 150 Watt Switching DC Power Supply

Input voltage: 115/230VAC @ 50/60Hz

· Output voltage: +5VDC @ 20A,

+12VDC @ 6A,

-12VDC @ 1A

P/N 104723 (pg 61)

· Mating output connector: P/N 104766 and 104715 (pg 61)

· Minimum load: all outputs at 10% of rated load • UL/CSA/TUV approved

• Size: 8.3"L x 4.7"W x 2.9"H • Weight: 3.0 lbs. Part No. Product No.

163299

QT2A1V.....\$19.95 \$17.95

+12VDC@6A

Digital Power 250 Watt Switching DC Power Supply

Input voltage: 90/250VAC @ 47/63Hz

5A @ 250VAC fused

· Output voltage: +5.5VDC @ 18A, +12.9VDC @ 10A, +12.9VDC @ 0.9A

Input connector: 12.9V@10A GND 12.9V@ Molex type 6-position double row blind mating right angle header Mating input connector: Molex type 6

position double row blind mating receptacle Output connector: Molex type 24-position

double row blind mating right angle header Mating output connector: Molex type

24-pošition double row blind mating receptacle

Minimum load: all outputs at 10% of rated load

UL/CUL/TUV/CE approved

Size: 10.0"L x 4.5"W x 1.9"H • Weight: 1.9 lbs.

Part No. Product No. **171643** USS256-351 \$14.95 \$13.49 \$11.95

c**Al**us

FLA

167492

ASTEC Switching DC Power Supply

Input voltage: 85/264VAC @ 47/440Hz

Output voltage: +5VDC @ 60A, +5.2VDC @ 288A

Input voltage auto switching

600V @ 25A internal fuse

10% adjustable on all outputs

· Over-voltage, overload, reverse-voltage, short circuit and thermal protection

Max operating temperature: 50°C (122°F)

Industrial type screw down terminals and Molex type power connectors • Internal cooling fan

Includes installation and application notes manual

UL/CSA/TUV/VDE/CE approved

• Size: 8.0"L x 7.9"W x 5.0"H

Part No. Product No. Watts Wt. (lbs.) 167513 VS3L2A2 1797 16.2....**\$199.95**

Power One Switching Power Supplies

Input voltage auto switching

Screw down terminals

600V @ 25A internal fuse

Remote voltage sense

10% adjustable on all outputs

Parallelable outputs w/ current sharing w/ same unit

Max operating temp.: 50°C (122°F) Over-voltage, reverse polarity and

short circuit protection Internal cooling fan

 UL/CSA/TUV approved • Size: 11.0"L x 8.0"W x 5.0"H

Part No.	Input voltage	Output voltage
167492	90/264VAC @ 47/440Hz	2VDC @ 250A
		2VDC @ 250A
		5VDC @ 35A
167530	180/264VAC @ 47/440Hz	5VDC @ 150A
		5VDC @ 250A

Part No.	Product No.	Watts	Wi	i. (lbs.)	Price
167492	SPM5F4F4A1H	1175		23.5	\$99.95
167530	HPM5A4A2KH	2000		21.0	199.95

JANSON 13.8VDC Regulated 41 Watt to 82 Watt Power Supplies

Input voltage: 115VAC @ 60Hz
 Fused
 Heavy duty 5'8" 3-prong power cord
 Illuminated rocker switch

• Output terminals: banana post/cigarette plug (see pages 82 & 144 for plugs)

				- 1-1-9 (- 1-9	9-/			
Part No.	Model No.	Fig.	Power (W)	Current	Size (L"xW"xH")	Wt. (lbs.)	1	10	25
164179	RPS1203C	1	41.4	3A	3.3 x 5.1 x 7.5	5.8	\$12.95	\$11.49	\$9.95
164161	RPS1203D	2	41.4	3A	3.3 x 5.1 x 7.5	5.8	14.95	13.49	10.95
163918	RPS1204T	3	55.2	4A	3.6 x 5.6 x 8.6	7.9	19.95	17.95	14.95
163926	RPS1205	3	69.0	5A	3.8 x 5.6 x 9.0	8.9	22.95	19.95	16.95
163934	RPS1206	3	82.8	6A	4.8 x 6.2 x 9.9	9.0	24.95	22.49	17.95







Fig. 1 Cigarette plug

Fig. 3 Banana & cigarette Banana terminal

See page 144 for mating banana power plugs and page 82 for cigarette power plugs



148603

Mean Well Authorized Distributor

• High efficiency • Low output ripple • 100% burn-in • UL approved • MTBF rated

· Short circuit, overload over voltage protected · Can provide all values and voltages upon request

· Input auto ranging

45 Watt Switching DC Power Supply

- Input voltage: 90VAC/260VAC @ 50/60Hz
- · Output voltage: +5VDC @ 3.0A, +12VDC @ 2.0A,-12VDC @ 0.3A
- Mating input connector: P/N 104432 (pg 61)
- Mating output connector: P/N 104731 (pg 61)

Minimu	ım load: all outputs at 10% of rated	load	 Data sh 	neet includ	ed
Size: 5.	0"L x 3.0"W x 1.6"H • Weight: 0.6 lb	S.	 One-ye 	ar warrant	у
Part No.	Product No.	1	10	25	100
20/101	DT/ISB	¢2/1 05	¢21 //0	¢27 05	\$24.05

60 Watt Switching DC Power Supply

- Input voltage: 100–240VAC @ 2A; 50-60Hz
- Output voltage: +5VDC @ 5.5A, +12VDC @ 2A, -5VDC @ 0.5A, -12VDC @ 0.5A
- Line regulation: 0.5%-1.0%
- Ripple and noise: 100-120mV peak to peak DC voltage adjustment: CH 1: +10, -5%
- Mating input/output connector: P/N 103587 (pg 64)
- Size: 6.3"L x 3.9"W x 1.5"H Minimum load: all output at 10% rated load · Weight: 1.2 lbs.
- Part No. Product No. .\$49.95 \$44.95 \$35.95

120 Watt Quad Output Switching DC Power Supplies

- Input voltage: 90-130VAC or 180-260VAC
- · Switch selectable input
- · Mating input/output connector: P/N 103587 (pg 64) spade terminal
- · Minimum load: all outputs at 10% of rated load
- · MTBF see chart on (pg 98)
- UL/CE/TUV approved
- Size: 8.0" x 4.4"W x 2.0"H
- · Weight: 2.0 lbs.

Part No.	Product No.	Watts	Output	1	10	25
132388	Q-120B	120	5VDC @ 11A; -5VDC @ 1A			
			12VDC @ 4A; -12VDC @ 1A	\$69.95	\$62.95	\$56.95
132370	Q-120D	124	5VDC @ 8A; 24VDC @ 2A			
			12VDC @ 2A; -12VDC @ 1A	69.95	62.95	56.95

25 Watt Single & Dual Output Switching DC Power Supplies

- Input voltage: 85-246VAC @ 47-63Hz
- Mating input connector: P/N 104432 (pg 61)
- · Mating output connector: P/N 104715 (pg 61)
- No minimum load required UL/CSA/TUV approved
- Size: 4.2"L x 2.4"W x 1.2"H · Weight: 0.4 lbs.

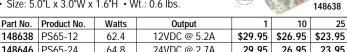
MTBF Hours vs Operating Temperature at 100% Load Operating Temp.

50°	С	79,97	8 hrs.	1.	4,104 hrs.	105,120 hrs.	•	10	
25	С	315,3	60 hrs.	6'	9,642 hrs.	376,680 hrs.		VI (II)	
art No	Produc	ł No	Watts		0.	ıtput	1	10	
artivo.	Produc	LINO.	vvall	>	U	ıtput		10	
40/02	DCOF	10	25.0	`	101/0	0 0 0 1 1	#00 OF	#40 OF	A47

Pa **148603** | PS25-12 12VDC @ 2.1A \$22.95 | \$19.95 | \$17.95 25.2 **148689** PD25-12 12VDC @ 1A (Dual) -12VDC @ 1A

65 Watt Single Output Switching DC Power Supplies

- Input voltage: 85-264VAC @ 47-63Hz
- Mating input connector: P/N 104432 (pg 61)
- Mating output connector: P/N 104731 (pg 61)
- No minimum load required UL/CSA/TUV approved
- Size: 5.0"L x 3.0"W x 1.6"H Wt.: 0.6 lbs.



148646 PS65-24 64.8 24VDC @ 2.7A 29.95 480 Watt Single Output Switching DC Power Supplies



Built-in remote control UL/CE/TUV approved

Mating input/output connector: P/N 103587

(pg 64) spade terminal · Remote voltage sensing · Protection: short circuit, overload, over voltage, over temperature

Cooling fan (temperature sensing) • Size: 7.3"L x 4.8"W x 3.8"H

PFC: 98% @ 115VAC; 95% @ 230VAC · Weight: 4.2 lbs.

Part No. Product No. Watts Output 10 1 **147053** SP500-24 24VDC @ 20A 480

\$219.95 \$189.95 \$169.95 219.95 189.95 169.95 161795 SP500-48 480 48VDC @ 10A

LPP 150 Series

Switching Power Supplies

- · 100% full load burn-in test
- PFC: 98% @ 115VAC; 95% @ 230VAC
- · Overload, over voltage & short circuit protection
- · UL/CUL/CE/TUV approved No minimum load requirement
- · Compact size, lightweight • Operating temp: 0-50°C



132388





SP 150 Series

LPS100 series

• Input voltage: 88-264VAC@47-63Hz

Part No.	Prod. No.	Watts	Output	Size(L"xW"xH")	Wt. (lbs.)	1	10	25
173471	LPS100-12	100.8	12VDC@8.4A	8.7 x 2.4 x 1.1	0.8	\$49.95	\$44.95	\$39.95
173462	LPS100-24	100.8	24VDC@4.2A	8.7 x 2.4 x 1.1	0.8	59.95	53.95	48.95

LPS 100 Series

LPP150 Series

Input voltage: 85-264VAC@47-63Hz

Part No.	Product No.	Watts	Output	Size (L"xW'xH")	Wt. (lbs.)	1	10	25
173454	LPP150-24	151.2	24VDC@6.3A	8.7x2.9x1.6	1.21	\$59.95	\$53.95	\$48.95
173446	LPP150-48	153.6	48VDC@3.2A	8.7x2.9x1.6	1.21	59.95	53.95	48.95

SP150 Series

 Input voltage: 85-264VAC@47-63Hz • Mating input/output connectors: P/Ns 103587 (pg 64)

	=							
Part No.	Product No.	Watts	Output	Size (L"xW"xH")	Wt. (lbs.)	1	10	25
173438	SP150-7.5	150	7.5VDC@20A	7.8x3.9x2.0	1.7	\$69.95	\$62.95	\$56.95
173420	SP150-12	150	12VDC@12.5A	7.8x3.9x2.0	1.7	79.95	71.95	64.95
173411	SP150-15	150	15VDC@10A	7.8x3.9x2.0	1.7	79.95	71.95	64.95
173403	SP150-24	150	24VDC@6.5A	7.8x3.9x2.0	1.7	79.95	71.95	64.95

25 Watt Single Output **Switching DC-DC Power Supply DC-to-DC Converters**

- Power Factor

Correction

- · Input voltage: 9.2VDC-18VDC
- · 2:1 input range
- · Low cost, high reliability
- · Built-in EMI filter, low ripple noise
- Voltage output adjustable





- Short-circuit, over voltage, and overload protection
- · Input/output connector: screw down terminals
- · Mating input/output terminals: recommend P/N 103587 or P/N 103595 (spade terminals, pg 64)
- Size: 3.9"L x 3.9"W x 1.5"H

Part No.	Product No.	Out. Voltage	1	10	25
175661	SD25A5	5V@5A	\$34.95	\$29.95	\$26.95
175804	SD25A12	12V@2.1A	34.95	29.95	26.95
175812	SD25A24	24V@1.1A	34.95	29.95	26.95







Mean Well Authorized Distributor Mean Well is an ISO-9001 Certified Company

• High efficiency • Low output ripple • 100% burn-in • Short circuit, overload over voltage protected • UL approved • MTBF rated • One-year warranty











7.5V, 15V, 24V and

9V, 13.5V and 27V

also available!

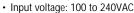
48V also available!

25 Watt Single Output Switching Power Supplies

- · Input voltage: 100 to 240VAC
- Full input range (no changes required for 110 or 220VAC operation)
- · Mating input/output connector: P/N 103587 (pg 64) spade terminal
- UL/TUV/CE approved
- MTBF see table below right
- No minimum load required Size: 3.9"L x 3.8"W x 1.4"H Weight: 0.8 lbs.

	Part No.	Product No.	Watts	Output	1	10	25
	123246	S-25-5★	25.0	5VDC @ 5.0A	\$34.95	\$31.49	\$27.95
	123254	S-25-12*	25.2	12VDC @ 2.1A	34.95	31.49	27.95
	123262	S-25-15	25.5	15VDC @ 1.7A	34.95	31.49	27.95
	123271	S-25-24*	26.4	24VDC @ 1.1A	34.95	31.49	27.95
ľ							

40 Watt Single Output Switching Power Supplies



- Full input range (no changes required for 110 or 220VAC operation)
- · Mating input/output connector: P/N 103587 (pg 64) spade terminal
- UL/TUV/CE approved
- · MTBF see table below right
- No minimum load required Size: 5.1"L x 3.9"W x 1.5"H Weight: 1.0 lb.

Part No.	Product No.	Watts	Output	1	10	25
123289	S-40-5	40	5VDC @ 8.0A	\$39.95	\$35.95	\$32.95
123297	S-40-12	42	12VDC @ 3.5A	39.95	35.95	32.95
123318	S-40-24	43	24VDC @ 1.8A	39.95	35.95	32.95

60 Watt Single Output Switching Power Supplies

- · Input voltage: 100 to 240VAC
- Full input range (no changes required for 110 or 220VAC operation)
- · Mating input/output connector: P/N 103587 (pg 64) spade terminal
- UL/TUV/CE approved
- · MTBF see table below right
- No minimum load required Size: 6.3"L x 3.8"W x 1.5"H Weight: 1.2 lbs.

Part No.	Product No.	Watts	Output	1	10	25
123326	S-60-5	60	5VDC @ 12A	\$44.95	\$39.95	\$35.95
123334	S-60-12	60	12VDC @ 5A	44.95	39.95	35.95
123342	S-60-15	60	15VDC @ 4A	44.95	39.95	35.95
123351	S-60-24	60	24VDC @ 2.5A	44.95	39.95	35.95

100 Watt Single Output Switching Power Supply Input voltage: 95 to 130VAC or 190 to 260VAC

- · Jumper selectable input
- · Mating input/output connector: P/N 103587 (pg 64) spade terminal
- UL/TUV/CE approved MTBF see table below right Weight: 1.4 lbs.
- No minimum load required Size: 7.8"L x 3.9"W x 1.5"H

		•				
Part No.	Product No.	Watts	Output	1	10	25
123385	S-100F-12	102	12VDC @ 8.5A	\$49.95	\$44.95	\$39.95

150 Watt Single Output Switching Power Supplies **A** ()

- Input voltage: 90 to 130VAC or 180 to 260VAC
- · Jumper selectable input
- · Mating input/output connector: P/N 103587 (pg 64) spade terminal
- UL/TUV/CE approved
- · MTBF see table right
- No minimum load required Size: 7.8"L x 4.3"W x 2.0"H Weight: 1.8 lbs.

Part No. Product No.		Watts	Output	1	10	25
123393	S-150-5	150	5VDC @ 30A	\$59.95	\$53.95	\$47.95
123414	S-150-7.5	150	7.5VDC @ 20A	59.95	53.95	47.95
123422	S-150-12	150	12VDC @ 12.5A	59.95	53.95	47.95
123431	S-150-15	150	15VDC @ 10A	59.95	53.95	47.95
123449	S-150-24	156	24VDC @ 6.5A	59.95	53.95	47.95
167345	S-150-48	154	48VDC @ 3.2A	59.95	53.95	47.95

240 Watt Single Output Switching Power Supplies

- Input voltage: 88 to 132VAC or 176 to 264VAC automatic switching
- Mating input/output connector: P/N 103587 (pg 64) spade terminal
- Automatic fan controls internal temperature
- · MTBF see table below
- UL/CSA/TUV/CE approved
 Size: 8.0"L x 3.7"W x 2.6"H

	(ib) seasons
5V,	7.5V, 15V and
30V	also available!

A ((

Part No.	Product No.	Watts	Output	Weight	1	10
137648	S-240-12	216	12VDC @ 18A	2.5 lbs.	\$99.95	\$89.95
137656	S-240-24	240	24VDC @ 10A	2.5 lbs.	109.95	99.95
167337	S-240-48	240	48VDC @ 5A	2.5 lbs.	109.95	99.95
						

300 Watt Single Output Switching Power Supplies 🕦 🔔 🤇 🤅

- 98% @ 115VAC; 95% @ 230VAC
- Input voltage: 100 to 240VAC (with PFC Power Factor Correction)
- Mating input/output connector: P/N 103587 (pg 64) spade terminal correction
- Over temperature protected Automatic fan controls internal temperature
- UL/TUV/CE approved MTBF see table below Size: 9.0"L x 4.5"W x 2.0"H

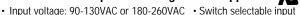
	Part No.	Product No.	Watts	Output	Weight	1	10
		SP-300-12		12VDC @ 24A	2.6 lbs.	\$139.95	\$125.95
	137402	SP-300-24	300	24VDC @ 12.5A	2.6 lbs.	139.95	125.95
1	161980	SP-300-48	300	48VDC @ 6.25A	2.6 lbs.	139.95	125.95

60 Watt Dual Output Switching Power Supplies

- · Input voltage: 100 to 240VAC
- Full input range (no changes required for 110 or 220VAC operation)
- · Mating input/output connector: P/N 103587 (pg 64) spade terminal
- UL/TUV/CE approved MTBF see table below Weight: 1.2 lbs.
- Minimum load: all outputs at 10% of rated load Size: 6.3"L x 3.8"W x 1.5"H

Part No.	Product No.	Watts	Output	1	10	25
123457	D-60A	56	5VDC @ 4A, 12VDC @ 3A	\$49.95	\$44.95	\$39.95
123465	D-60B	58	5VDC @ 3A, 24VDC @ 1.8A	49.95	44.95	39.95

120 Watt Dual Output Switching Power Supplies



- Mating input/output connector: P/N 103587 (pg 64) spade terminal
- · Minimum load: all outputs at 10% of rated load
- UL/TUV/CE approved MTBF see table below Size: 8.0"L x 4.4"W x 2.0"H

ſ	Part No.	Product No.	Watts	Output	Weight	1	10
	132409	D-120A	120	5VDC @ 12A, 12VDC @ 5A	1.9 lbs.	\$59.95	\$53.95
ĺ	132396	D-120B	126	5VDC @ 6A, 24VDC @ 4A	1.9 lbs.	59.95	53.95

60 Watt Triple Output Switching Power Supplies



- Full input range (no changes required for 110 or 220VAC operation)
- · Mating input/output connector: P/N 103587 (pg 64) spade terminal
- UL/TUV/CE approved MTBF see table below Weight: 1.2 lbs.
- Minimum load: all outputs at 10% of rated load Size: 6.3"L x 3.8"W x 1.5"H

Part No.	Product No.	Watts	Output	1	10	
123481	T_60B	61	5VDC @ 5A, 12VDC @ 2.5A	\$44.95	\$39.95	
123701	1-000	01	-12VDC @ 0.5A	Ψ44.73	ψυ 7.70	
123490	T 600	63	5VDC @ 5A, 15VDC @ 2.0A	44.95	39.95	
123470	1-000	03	-15VDC @ 0.5A	44.73	37.73	

MTBF (hours) vs Operating Temperature/Load

Models: S-25, S-40, S-60, S-100F, Models: S-240, SP-300 S-150, D-60, D-120, T-60, Q-120

	Operating Temp.	50°C	40°C	30.C	Operating Temp.	50°C	40°C	30.C
]	Load 100%	10,000	30,000	90,000	Load 100%	45,000	90,000	180,000
	Load 60%	30,000	80,000	200,000	Load 60%	62,500	125,000	250,000





\$1555E

167636

167610

30 Watt Single Output Switching **DC Power Supply**

- · Input voltage: 100/230VAC @ 50/60Hz
- Output volt.: +12VDC @ 2.5A
- Mating input/output connector: P/N 103587 (pg 64)
- Adjustable outputs ±10%
- · Input/output connector: screw down terminals
- Size: 6.2"L x 3.9"W x 1.5H Weight: 1.1 lbs.

Part No. Product No. **167687** MRE122R5U.......**\$12.95 \$11.49**

Dual/Triple Output Power Supply

67 Watt PRK Series 120VAC

- · Input voltage: 120VAC @ 50/60Hz
- · Output voltage:
- +5VDC @ 5.0A;
- +12VDC @ 2.5A: -12VDC @ 1.0A
- · Mating input/output connector: P/N 103587 (pg 64)
- Input/output connector: screw down terminals
- · Adjustable outputs @ ±10%
- Size: 7.9"L x 4.1"W x 1.7"H · Weight: 1.7 lbs. Part No. Product No. 10 167679 PRK70U01212......\$19.95 \$17.95 \$15.95

Single Output DC Power Supply

150 Watt SXI Series 230VAC

- · Input voltage: 230VAC @ 50/60Hz
- · Output voltage:
- +15VDC @ 10A
- Adjustable outputs @ ±10%
- Mating input/output connector: P/N 103587 (pg 64)
- · Input/output connector: screw down terminals
- Size: 6.8"L x 3.7"W x 1.8"H · Weight: 1.3 lbs.

Part No. Product No. SXI15015S**\$24.95 \$22.49**

PCA 3 Watt DC to DC Converter

- · Input/output isolation @ 500Vrms
- · 70% typical efficiency
- · 12-pin (use socket P/N 39351 - pg 59)
- Size: 1.2"L x 0.7"W x 0.5"H
- · Weight: 0.02 lbs.

Part No. Product No. Input Voltage 10

153736 EPC1053 12VDC......\$2.95 \$2.49 \$1.95 ASTEC 21 Watt DC to DC

Power Converter

- Input: 16VDC (max.)
- · Output signals for battery-low and battery-in-use
- · Mating input connector: P/Ns 100802/103202 (pg 61)
- · Mating output connector: P/Ns 103211/103202 (2) - pg 61
- · Recharges battery from external source
- Size: 3.6"L x 1.6"W x 0.8"H
 Weight: 0.1 lbs.
- · No minimum load required

Part No. Product No. Description 109276 AA9090A 21 watt converter ... \$4.95 \$4.49

Output: +5.1 VDC @ 3.75A,

+12 VDC @ 0.1A, 26 VDC @ 0.04A,

350 VAC @ 5mA

Switching DC Power Supplies

30 & 50 Watt ERK Series 120/240VAC

· Dual or triple outputs



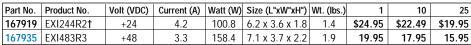
- · UL/CSA/TUV/CE approved Input volt.: 120/240VAC @ 50/60Hz, auto switching
- · Input/output connector: screw down terminals
- Mating input / output connector: P/N 103587 (pg 64)

	1			1.9/					
Part No.	Product No.	Volt (VDC)	Current (A)	Watt (W)	Size (L"xW"xH")	Wt. (lbs.)	1	10	25
167601	ERK301212W	+12/+12	1.5/1.2	30 max.	6.3 x 3.8 x 1.5	1.1	\$14.95	\$13.49	\$11.95
167636	ERK50U1212	+5/+12/-12	6.0/2.5/0.5	50 max.	7.4 x 4.1 x 1.6	1.5	17.95	15.95	14.49

Enclosed DC Power Supplies

100 & 150 Watt EXI Series 220VAC

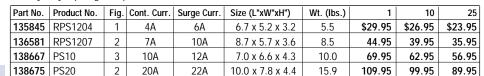
- Single output Adjustable outputs ±10%
- · Input voltage: 220VAC @ 50/60Hz
- · Mating input / output connector: P/N 103587 (pg 64)
- Input/output connector: screw down terminals † Cover not included



. **JAMECO** 13.8VDC Precision Regulated Linear Power Supplies

Fia. 1

- · Output terminal: binding post/plug (P/N 138667 connectors in rear) see page 144 for plugs
- · Input voltage: 115VAC @ 60Hz
- P/N 136581 includes overheating protection
- · May require fan cooling if operated continuously at high current
- · Fuse protected
- · Short-circuit protection
- · Heavy duty 3-pronged 5' power cord



EOS Switching Power Supplies

- Input voltage: 100 240VAC @ 50/60Hz
- Input connector: 3-postion 0.156" male locking headers
- Mating input connector: recommend P/N 104432 (pg 61)
- 3.5A @ 250V fuse

Series VLT40 · Output connector: 6-position 0.156" male header

 Size: 4.0"L x 2.0"W x 0.6"H · Weight: 0.3 lbs.

Series VLT60 • Output connector: 6-position 0.156" male header

• Size: 4.0"L x 2.0"W x 0.6"H · Weight: 0.3 lbs.

Series VLT100 • Output connector: 12-position 0.156" male header • Size: 5.1"L x 3.1"W x 0.8"H · Weight: 0.6 lbs.

Series VLT130 • Output connector: 8-position 0.09" male header or 6-position 0.197" terminal blocks

Size: 5.1"L x 3.1"W x 0.8"H · Weight: 0.6 lbs.



Fig. 2



188103



188058

Fig. 3

185447

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			0		
Part No.	Product No.	Watts	Outputs	1	10
188103	VLT40-3203	40	3.3VDC@6A; 5VDC@3A; -12VDC@500mA	\$39.95	\$35.95
188058	VLT60-1001	60	12VDC@5A	49.95	44.95
188066	VLT60-3000	60	5VDC@8A; 12VDC@3A; -12VDC@500mA	49.95	44.95
188111	VLT100-1003	100	24VDC@4.2A	59.95	53.95
185455	VLT100-4000	100	5.2VDC@12A; 12VDC@4A; -5VDC@800mA; -12VDC@800mA	69.95	62.95
185560	VLT130-1100	130	5VDC@16A	79.95	71.95
188040	VLT130-1103	130	24VDC@3.4A	79.95	71.95
185480	VLT130-3100-S2	130	3.3VDC@16A; 5VDC@14A; 12VDC@1.5A	79.95	71.95
185447	VLT130-4110	130	3.3VDC@16A; 5VDC@14A; ±12VDC@1.5A	89.95	79.95
185543	VLT130-4110-S16	130	3.3VDC@16A; 5VDC@14A; 12VDC@1.5A; -5VDC@1.5A	89.95	79.95
185471	VLT130-4112	130	3.3VDC@16A; 5VDC@14A; ±15VDC@1.5A	89.95	79.95





100 AC Tube Axial Fans





We carry major manufacturers - manufacturers may vary - call for additional OEM PRICING.

- Low acoustical noise rating Rating 115VAC @ 50/60Hz • Rating 220VAC @ 50/60Hz • Agency approved fans
- Ball and sleeve bearings Air flow from 10 to 236 CFM
 - Power input by lead wires or terminals





For Fan Guards and Cords – see page 102

			Tor Tan Guaras and Goras See page 102							131703				
Part Number	Manufacturer	Product Number	Voltage (AC)	Dimensions W" x H" x D"	Air Flow CFM	Bearing Ball/Sleeve	Current (mA)	Power Watts	Agency Approvals	Noise (dba)	Connection Wires/Terminals	1	Pricing 10	50
	Globe	A-24-B12A-15W3-000	115 VAC	2.36 x 2.36 x 1.20	10	Ball	44 mA	4.0	UL, CSA, VDE	29	12" lead wires	\$6.95	\$6.25	\$5.59
75408	Fulltech	UF80B12SWH★	115 VAC	3.15 x 3.15 x 1.00	24	Sleeve	140 mA		UL, CSA, TUV, CE		12" lead wires	11.95	10.95	9.95
146077	Common Wealth	FP108AX-S1-B	115 VAC	3.15 x 3.15 x 1.00	24	Ball	140 mA	14.0	UL, CE	29	12" lead wires	13.95	12.95	11.95
111915	Fulltech	UF80A12SWL	115 VAC	3.15 x 3.15 x 1.50	25	Sleeve	110 mA		UL, CSA, TUV, CE		12" lead wires	11.95	10.95	9.95
16977	Fulltech	UF80A12BWL★	115 VAC	3.15 x 3.15 x 1.50	25	Ball	110 mA	11.0	UL, CSA, TUV	32	12" lead wires	12.95	11.95	10.95
16969	Fulltech	UF80A12BTL★	115 VAC	3.15 x 3.15 x 1.50	25	Ball	110 mA	11.0	UL, CSA	32	terminals	13.95	12.95	11.95
102904	Fulltech	UF80A12BWH★	115 VAC	3.15 x 3.15 x 1.50	30	Ball	120 mA	12.0	UL, CSA, TUV	36	12" lead wires	13.95	12.95	11.95
75432	Sunon	SF11592A-1092HSL	115 VAC	3.63 x 3.63 x 1.00	36	Sleeve	130 mA	12.0	UL, CSA, TUV	39	12" lead wires	13.95	12.95	11.95
75459	Sunon	SF11592A-1092HBT★	115 VAC	3.63 x 3.63 x 1.00	37	Ball	130 mA	12.0	UL, CSA	40	terminals	14.95	13.95	12.95
124062	Sunon	SP101AT1122HBT	115 VAC	4.68 x 4.68 x 1.00	78	Ball	180 mA	18.0	CSA, TUV	46	terminals	14.95	13.95	12.95
118965	Fulltech	UF12A12BTLL	115 VAC	4.68 x 4.68 x 1.50	52	Ball	85 mA	8.4	UL, CSA	15	terminals	12.95	11.95	10.95
109874	Fulltech	UF12A12STL	115 VAC	4.68 x 4.68 x 1.50	81	Sleeve	110 mA	9.0	UL, CSA	47	terminals	11.95	10.95	9.95
16951	Jameco	FAN2RFE (used)	115 VAC	4.68 x 4.68 x 1.50	90	Sleeve	150 mA	15.0	UL, CSA	39	terminals	5.95	4.95	3.95
16934	Jameco	FAN1(FP108-1-S1-B)★	115 VAC	4.68 x 4.68 x 1.50	90	Ball	190 mA	15.0	UL, CSA	39	terminals	12.95	11.95	10.95
111894	Common Wealth	FP108-1-S1/W★	115 VAC	4.68 x 4.68 x 1.50	105	Sleeve	180 mA	17.0	UL, CSA	47	12" lead wires	11.95	10.95	9.95
106585	Common Wealth	FP108-1-S1/T	115 VAC	4.68 x 4.68 x 1.50	105	Sleeve	140 mA	12.0	UL, CSA, CE	35	terminals	11.95	10.95	9.95
102883	Sunon	SP100A-1123XBT★	115 VAC	4.68 x 4.68 x 1.50	117	Ball	240 mA	20.0	UL, CSA, TUV	50	terminals	14.95	13.95	12.95
108724	Pabst	W2E142-CC13-16	115 VAC	6.75 x 5.90 x 1.50	175	Ball	140 mA	16.0	UL, CSA	54	terminals	29.95	26.95	23.95
164275	Pabst	W2E142-BB05-87	115 VAC	6.75 x 5.90 x 1.50	236	Ball	226 mA	26.0	UL, CSA, CE	62	term (hall effect 3 lead)	24.95	22.49	19.95
141604	Fulltech	UF15P12BTH	115 VAC	6.75 x 5.90 x 2.00	205	Ball	440 mA	33.0	CE	55	terminals	24.95	22.49	19.95
174932	NMB	3115FS-23T-B10	220 VAC	3.15 x 3.15 x 1.50	25	Ball	30 mA	4.6	UL, CSA, TUV, CE	25	terminals	11.95	10.95	9.95
100917	Sunon	SF23080A★	220 VAC	3.15 x 3.15 x 1.50	30	Sleeve	60 mA	13.5	UL, CSA, TUV	35	12" lead wires	12.95	11.95	10.95
131983	Toyo Fan	UT926A8	220 VAC	3.63 x 3.63 x 1.00	30	Ball	30 mA	8.0	UL	35	terminals	13.95	12.95	11.95
175003	NMB	4715MS-23W-B10	220 VAC	4.68 x 4.68 x 1.50	50	Ball	45 mA	6.0	UL, CE, TUV	28	12" lead wires	11.95	10.95	9.95
159011	NMB	4715PS-23T-B30	220 VAC	4.68 x 4.68 x 1.50	90	Ball	90 mA	14.5	UL, CSA, TUV	53	terminals	12.95	11.95	10.95
102891	Sunon	DP200A-2123XBT★	220 VAC	4.68 x 4.68 x 1.50	117	Ball	140 mA	21.0	UL, CSA, TUV	50	terminals	14.95	13.95	12.95

DC Brushless Fans

We carry major manufacturers - manufacturers may vary - call for additional OEM PRICING







· Low acoustical noise rating

• Fan part number 16993 (pg 101) is an ideal replacement for the PC/XT computer power supply fan









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161699

Part		Product	Voltage	Dimensions (In.)	Air Flow	Bearing	Current	Power	Agency	Noise	Lead		Pri	cing	
Number	Manufacturer	Number	(DC)	W" x H" x D"	CFM	Ball/Sleeve	(mA)	Watts	Approvals	(dBa)	Wires	1	10	50	100
163475	Nidec	C34427-55APP	5 VDC	1.00 x 1.00 x 0.40	0.5	Ball	90 mA	0.45		22	2"	\$5.95	\$5.35	\$4.79	\$3.95
131246	Adda	AD0205LX-G50	5 VDC	1.00 x 1.00 x 0.40	1.3	Sleeve	120 mA	0.6	UL, CSA, CE	18.7	3"	10.95	9.95	8.95	6.95
142851	Shicoh	0410N-5E	5 VDC	1.60 x 1.60 x 0.40	4.2	Ball	190 mA	0.9		23	2.5"	7.95	6.95	6.25	5.59
102921	Sunon	KD0504PFS2★	5 VDC	1.60 x 1.60 x 0.40	6.3	Sleeve	250 mA	0.6	UL, CSA	24.3	12"	7.95	6.95	6.25	5.59
166887	Copal	F412R-05LB-09	5 VDC	1.60 x 1.60 x 0.50	3.9	Ball	100 mA	0.5		16	7"	5.95	5.35	4.79	3.95
171678	Delta	AFB0405HHD	5 VDC	1.60 x 1.60 x 0.80	9.4	Ball	700 mA	3.5		36	2.5"	4.95	4.49	3.95	3.49
102912	Sunon	KD1202PFB2	12 VDC	1.00 x 1.00 x 0.40	2.0	Ball	95 mA	1.2	UL, CSA, TUV	24.5	6"	12.95	11.95	10.95	9.95
162907	Elina	KDA123510MB	12 VDC	1.40 x 1.40 x 0.40	4.5	Ball	120 mA	1.5	UL, CSA, TUV, CE	21	3"	5.95	5.35	4.79	4.25
102939	Jamicon	JF0410S1H★	12 VDC	1.60 x 1.60 x 0.40	6.4	Sleeve	110 mA	1.3	UL, CSA, TUV, CE	34.7	10.5"	5.95	5.35	4.79	3.95
161699	Sunon	KD1204PFB2-8	12 VDC	1.60 x 1.60 x 0.40	6.5	Ball	70 mA	0.9	UL, CSA, TUV	24.5	11"	7.95	6.95	6.25	5.59
174131	Jamicon	JF0413S1M	12 VDC	1.60 x 1.60 x 0.50	3.8	Sleeve	90 mA	1.1	UL, CSA, TUV	26	14"	4.95	4.49	3.95	3.49
174123	Jamicon	JF0413B1M	12 VDC	1.60 x 1.60 x 0.50	3.8	Ball	100 mA	1.2	UL, CUL, TUV	26	14"	4.95	4.49	3.95	3.49
18770	Sanyo Denki	109P0412B704	12 VDC	1.60 x 1.60 x 0.60	6	Sleeve	60 mA	0.7		22	4"	5.95	5.35	4.79	4.25
154851	NMB	1606KL-04W-B30*	12 VDC	1 60 x 1 60 x 0 60	6	Ball	67 mA	0.8	UL CSA VDF	28	8"	6.95	6.25	5.59	4.95

DC Brushless Fans continued on page 101 & 102





We carry major manufacturers – manufacturers may vary – call for additional OEM PRICING.



150421



134586



 P/N 16993 is an ideal replacement for the PC/XT computer power supply fan

• 134586: Blower type fans

• 172460: Has third lead for rotor • 174967: 3 lead wires • 174941: Locked rotor

† Temp Control: 151335/163601/163619 (35°C); 166959 (40°C); 162739 (50°C, 3 leads)







102875

				Temp Control: 151335/1					1	I			Deia	la.a.	
Part Number	Manufacturer	Product Number	Voltage (DC)	Dimensions W" x H" x D"	Air Flow CFM	Bearing Ball/Sleeve	Current (mA)	Power Watts	Agency Approvals	Noise (dBa)	Lead Wires	1	Pric 10	ing 50	100
136178	Adda	AD0412MS-C70	12 VDC	1.60 x 1.60 x 0.80	5	Sleeve	110 mA	1.32	UL, CSA, TUV	23	9"	\$4.95	\$4.49	\$3.95	\$3.49
75344	Delta	DFB0412M★	12 VDC	1.60 x 1.60 x 0.80	7.3	Ball	80 mA	0.8	UL, CSA, TUV	28	10"	5.95	5.35	4.79	4.29
139601	Elina	KDA120515M	12 VDC	2.00 x 2.00 x 0.60	10	Sleeve	130 mA	1.6		27	12"	6.95	6.25	5.59	4.95
147491	Shicoh	0610-12HH	12 VDC	2.36 x 2.36 x 0.40	16.2	Ball	150 mA	1.8		38	5"	5.95	5.35	4.79	4.29
104205	Panaflo	FBA06T12L★	12 VDC	2.36 x 2.36 x 0.60	12	Sleeve	130 mA	1.1		24	6"	6.95	6.25	5.59	4.95
151327	NMB	2406KL-04W-B40-L00	12 VDC	2.36 x 2.36 x 0.60	16	Ball	130 mA	1.6	UL, CSA, VDE	31	9"	6.95	6.25	5.59	4.95
175046	Globe	D24-D08A-04W3-000	12 VDC	2.36 x 2.36 x 0.80	10.6	Ball	90 mA	0.8	UL, CSA, TUV, CE	22	13"	4.95	4.49	3.95	3.49
144160	Adda	AD0612LB-C70GL	12 VDC	2.36 x 2.36 x 0.80	12.6	Ball	80 mA	1.0	UL, CSA, TUV	22.7	6"	4.95	4.49	3.95	3.49
75352	CommonWealth	FP108FDC12VS2★	12 VDC	2.36 x 2.36 x 1.00	15.5	Sleeve	110 mA	1.3	UL, CSA, TUV	25	12"	5.95	5.35	4.79	4.25
150421	Jamicon	JF0625B1H	12 VDC	2.36 x 2.36 x 1.00	17.6	Ball	200 mA	2.4	UL, CSA, VDE	28.5	10"	5.95	5.35	4.79	4.25
136143	Delta	SB0612M	12 VDC	2.36 x 2.36 x 1.00	17.7	Sleeve	200 mA	2.4	UL, CSA, VDE	26.5	5"	3.95	3.55	3.19	2.79
147029	Nidec	TA225DC-M33455-16	12 VDC	2.36 x 2.36 x 1.00	20	Ball	220 mA	2.6	UL, CSA	47	11"	4.95	4.49	3.95	3.49
102947	Jamicon	JF0625S1H	12 VDC	2.36 x 2.36 x 1.00	20.5	Sleeve	230 mA	2.7	UL, CSA, TUV	30	11"	5.95	5.35	4.79	4.25
134586	Delta	BFB0712H	12 VDC	2.98 x 2.98 x 1.18	11.3	Ball	360 mA	2.6	UL, CSA, TUV, VDE	38	4"	9.95	8.95	7.95	6.95
154675	Panaflo	FBA08T12H5D★	12 VDC	3.15 x 3.15 x 0.60	33.5	Sleeve	260 mA	2.4	UL, CSA	34	11"	7.95	6.95	6.25	5.59
141920	Adda	AD0812HB-C70	12 VDC	3.15 x 3.15 x 0.80	27.3	Ball	240 mA	2.8	UL, CSA	34	12"	9.95	8.95	7.95	6.95
75361	Jamicon	FAN6 (JF0825B1L)	12 VDC	3.15 x 3.15 x 1.00	25	Ball	70 mA	1.2	UL, CSA	25	11"	6.95	6.25	5.59	4.95
16993	Jameco	FAN7 (JF0825S1L)★	12 VDC	3.15 x 3.15 x 1.00	27	Sleeve	140 mA	1.6	UL, CSA	25	12"	6.95	6.25	5.59	4.95
131748	NMB	3110KL-04W-B20★	12 VDC	3.15 x 3.15 x 1.00	28	Ball	140 mA	1.3	UL, CSA	25	9"	6.95	6.25	5.59	4.95
154288	Sunon	KDE1208PTS3-6	12 VDC	3.15 x 3.15 x 1.00	29.4	Sleeve	120 mA	1.4	UL, CSA	24.5	5"	5.95	5.35	4.79	4.29
123529	Adda	AD0812MS-A70GL	12 VDC	3.15 x 3.15 x 1.00	32	Sleeve	150 mA	1.8	UL, CSA, TUV	23.1	12"	6.95	6.25	5.59	4.95
102955	Sunon	KD1208PTB1-6★	12 VDC	3.15 x 3.15 x 1.00	42.5	Ball	220 mA	2.6	UL, CSA, TUV, CE	33.5	12"	7.95	6.95	6.25	6.25
172460	Nidec	TA300DCM33406-68	12 VDC	3.15 x 3.15 x 1.00	43	Ball	290 mA	3.5	UL, CSA	41	11"/3 lead	7.95	6.95	6.25	5.59
166959	NMB (Smart Fan)	3110NL-012Q340-00 [†]	12 VDC	3.15 x 3.15 x 1.00	35	Ball	290 mA	3.5	UL, CSA	35	3"	8.95	7.95	6.95	6.25
151335	Delta (Smart Fan)	DFC0812B [†]	12 VDC	3.15 x 3.15 x 1.00	37.4	Ball	200 mA	2.4	UL, CSA, TUV	32	17"	9.95	8.95	7.95	6.95
108425	Superred	CHA9212AB	12 VDC	3.63 x 3.63 x 1.00	31	Ball	120 mA	1.7		24	12"	5.95	5.35	4.79	4.25
154641	Nidec	D09T12PH★	12 VDC	3.63 x 3.63 x 1.00	42	Ball	170 mA	2.5		48	10"	6.95	6.25	5.59	4.95
75441	Common Wealth	FP108BDC12VS1	12 VDC	3.63 x 3.63 x 1.00	45	Sleeve	320 mA	3.1	UL, CSA, TUV, CE	32	10"	6.95	6.25	5.59	4.95
172478	Delta	DFB0912H-R00	12VDC	3.63 x 3.63 x 1.00	49.5	Ball	300 mA	3.1	UL,CSA,CE	35	8"/3 lead	6.95	6.25	5.59	4.95
116476	Jamicon	JF0925S1H	12 VDC	3.63 x 3.63 x 1.00	53	Sleeve	350 mA	4.2	UL, CSA, TUV	37	10"	7.95	6.95	6.25	5.59
102963	Nidec	TA350DC-M33503-55	12 VDC	3.63 x 3.63 x 1.00	56	Ball	400 mA	4.8	UL, CSA	45	8"	7.95	6.95	6.25	5.59
162739	NMB (Smart Fan)	3610KL-04W-B56 [†]	12 VDC	3.63 x 3.63 x 1.00	55	Ball	430 mA	3.8	UL, CSA, VDE, CE	37	10"	8.95	7.95	6.95	5.95
174140	Common Wealth	FP108MS3	12 VDC	4.68 x 4.68 x 1.00	50	Sleeve	140 mA	2.9	UL, CSA, TUV, CE	25	12"	6.95	6.25	5.59	4.95
174959	NMB	4710NL-04T-B20	12 VDC	4.68 x 4.68 x 1.00	60	Ball	200 mA	1.8	UL, CSA, TUV, CE	29	terminals	6.95	6.25	5.59	4.95
75467	NMB	4710NL-04W-B30	12 VDC	4.68 x 4.68 x 1.00	70	Ball	320 mA	2.9	UL, CSA, VDE	34	12"	7.95	6.95	6.25	5.59
174916	NMB	4710NL-04T-B30	12 VDC	4.68 x 4.68 x 1.00	70	Ball	320 mA	2.9	UL, CSA, TUV	34	terminals	7.95	6.95	6.25	5.59
174086	Jamicon	JF1225S1M	12 VDC	4.68 x 4.68 x 1.00	74	Sleeve	250 mA	3.0	UL, CUL, CE	36	11"	7.95	6.95	6.25	5.59
102875	Delta	WFB1212H	12 VDC	4.68 x 4.68 x 1.00	86.5	Ball	360 mA	4.3	UL, CSA, TUV	37.6	12"	8.95	7.95	6.95	6.25
174924	Globe	D47-B10A-04T3-000	12 VDC	4.68 x 4.68 x 1.00	90	Ball	740 mA	6.8	UL, CSA	39	terminals	8.95	7.95	6.95	6.25
163619	NMB (Smart Fan)	4710NL012P535P0 [†]	12 VDC	4.68 x 4.68 x 1.00	90	Ball	740 mA	8.8		38.5	4"	4.95	4.49	3.95	3.49
174941	Globe	D47-B15A-04T2-100	12 VDC	4.68 x 4.68 x 1.50	75	Ball	520 mA	5.3	UL, CSA, TUV	38	terminals	9.95	8.95	7.95	6.95
174967	NMB	4715KL-0410W-B29	12 VDC	4.68 x 4.68 x 1.50	97	Ball	520 mA	4.8	UL, CSA, TUV	40	12"/3 lead	9.95	8.95	7.95	6.95
159020	Sunon	KDE1212PMS1-6A	12 VDC	4.68 x 4.68 x 1.50	107	Sleeve	570 mA	6.8	UL, CSA	41	12"	11.95	10.95	9.95	8.95
94625	NMB	4715KL04W-B30★	12 VDC	4.68 x 4.68 x 1.50	108	Ball	720 mA	6.6	UL, CSA, TUV, CE	43	12"	12.95	11.95	10.95	9.95
163601	Delta (Smart Fan)	WFC1212BE [†]	12 VDC	4.68 x 4.68 x 1.50	108	Ball	650 mA	6.6	UL, CSA, VDE	41.3	12"	10.95	9.95	8.95	7.95
175020	NMB	6820PL-04W-B30	12 VDC	6.75 x 6.75 x 2.00	170	Ball	1900 mA	21.8	UL, CSA, TUV	49	13"	14.95	13.49	11.95	10.95
100909	Sunon	KD2404PKS2	24 VDC	1.60 x 1.60 x 0.80	6.5	Sleeve	50 mA	1.2	UL, CSA, TUV, CE	25.5	12"	6.95	6.25	5.59	4.95
175038	NMB	2408NL-05W-B20	24 VDC	2.36 x 2.36 x 0.80	11	Ball	60 mA	0.9	UL, CSA	22	13"	4.95	4.49	3.95	3.49





102 DC Brushless Fans (Continued)

We carry major manufacturers - manufacturers may vary - call for additional OEM PRICING.

Part		Product	Voltage	Dimensions	Air Flow	Bearing	Current	Power	Agency	Noise	Lead	Pricing			
Number	Manufacturer	Number	(DC)	W" x H" x D"	CFM	Ball/Sleeve	(mA)	Watts	Approvals	(dBa)	Wires	1	10	50	100
140661	NMB	2408NL-05W-B60	24 VDC	2.36 x 2.36 x 0.80	18.4	Ball	100 mA	2.4		31	1.5"	\$4.95	\$4.49	\$3.95	\$3.49
174107	Jamicon	JF0625S2M	24 VDC	2.36 x 2.36 x 1.00	18	Sleeve	130 mA	3.1	UL, TUV	24	10"	4.95	4.49	3.95	3.49
146093	NMB	2410ML-05W-B40	24 VDC	2.36 x 2.36 x 1.00	22	Ball	100 mA	2.4	UL, CSA, VDE	35	12"	6.95	6.25	5.59	4.95
174078	Jamicon	JF0825S2L	24 VDC	3.15 x 3.15 x 1.00	26	Sleeve	200 mA	4.8	CUL, TUV	22.2	10"	4.95	4.49	3.95	3.49
112408	Jamicon	JF0825B2M	24 VDC	3.15 x 3.15 x 1.00	32	Ball	130 mA	3.1	UL, CSA, TUV	28	10"	5.95	5.35	4.79	4.29
162923	Jamicon	JF0825S2H	24 VDC	3.15 x 3.15 x 1.00	39.2	Sleeve	150 mA	3.6	UL, CSA, TUV	31	10"	6.95	6.25	5.59	4.95
136160	Jamicon	JF0825B2H★	24 VDC	3.15 x 3.15 x 1.00	39.2	Ball	150 mA	3.6	UL, CSA, TUV	31	12"	8.95	7.95	6.95	6.25
136792	Innovative	BP922524M	24 VDC	3.63 x 3.63 x 1.00	31	Ball	140 mA	3.3	UL, CSA, TUV	31	12"	6.95	6.25	5.59	4.95
174094	Jamicon	JF0925S2H	24 VDC	3.63 x 3.63 x 1.00	52	Sleeve	160 mA	3.8	CUL	37	7.5"	7.95	6.95	6.25	5.59
117049	NMB	4710PL-05W-B20-100	24 VDC	4.68 x 4.68 x 1.00	53	Ball	90 mA	2.1	UL, CSA	29	12"	11.95	10.95	9.95	8.95
175281	Globe	D47B10A05W2000	24 VDC	4.68 x 4.68 x 1.00	70	Ball	160 mA	2.88	UL, CSA, TUV, CE	34	12"	11.95	10.95	9.95	8.95
100968	NMB (Boxer)	4715KL-05W-B10	24 VDC	4.68 x 4.68 x 1.50	83	Ball	150 mA	3.6		35	12"	11.95	10.95	9.95	8.95
153411	Sunon	KD2412PMB2-6A	24 VDC	4.68 x 4.68 x 1.50	98	Ball	230 mA	5.5	UI, CSA, TUV	36.5	12"	13.95	12.49	10.95	9.95
175476	NMB	6820PL-05W-B10	24 VDC	6.75 x 6.75 x 2.00	170	Ball	480 mA	11.5	UL, CSA, TUV, CE	45	12.5"	19.95	17.95	15.95	13.95
166730	Mechatronics	A9225H48B	48 VDC	3.63 x 3.63 x 1.00	51	Ball	100 mA	4.8	UL, CSA, TUV	36	13"	7.95	6.95	6.25	5.59
175468	NMB	5920PL-07W-B30	48 VDC	6.75 x 5.90 x 2.00	210	Ball	400 mA	14.4	UL, CSA	51	12.5"	14.95	13.49	11.95	11.49
175505	NMB	5920PL-07W-B49	48 VDC	6.75 x 5.90 x 2.00	230	Ball	450 mA	21.6	UL, CSA, TUV	54	8" (5)	14.95	13.49	11.95	11.49

Heat Sink Fans and Cords

Fan Guards and Filters





130104/138579 Compatible with AC/DC Fans

All guards, screens and filters fit all fans by matching the H" dimension. Example: 75408 fan height is 3.15", 31923 metal guards are 3.15". They fit one another.

Part No.	Description	1	10	100
123502	1.60" metal (chrome) guard	\$.99	\$.85	\$.69
163432	2.00" metal (chrome) guard	.99	.85	.69
120037	2.36" metal (chrome) guard	.99	.85	.69
31923★	3.15" metal (chrome) guard	1.09	.89	.75
123511*	3.63" metal (chrome) guard	1.09	.99	.75
25734*	4.68" metal (chrome) guard	1.09	.99	.75
138561	3.15" plastic filter w/ mesh	1.75	1.49	1.19
163459	3.63" plastic filter w/ mesh	1.75	1.49	1.19
25726★	4.68" plastic filter w/ mesh	1.95	1.75	1.39
138579	3.15" aluminum washable filter	3.25	2.95	2.69
130104	4.68" aluminum washable filter	3.49	3.25	2.95

(see above and pages 100 & 101)

Heat Sinks/Heat Sinks with Fans for 486, 586, 686 & Pentium® Processors Keep your 486, 586, 686 & Pentium® chips cool!



129234











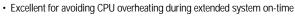




180961



174027



· High efficiency cooling fan 174115/67660: 14" lead wires

25726

· Easy installation - just snap it in

* Heat sink with fan

				17 1027			
Part No.	Description	Size (L" x W" x D")	Wt.(lbs.)	Agency Approvals	1	10	50
129226	For 486 CPU – adhesive tape (0.4"H)	1.70 x 1.63 x 0.36	0.1	_	\$2.49	\$1.95	\$1.49
129234	For 486 CPU – adhesive tape (0.7"H)	1.70 x 1.63 x 0.66	0.1	_	2.95	2.49	1.49
118092*	For 686 and Pentium® 75-166*	2.06 x 1.94 x 0.75	0.2	CSA/CE/TUV	5.95	5.35	4.75
153234	For Pentium® 75-133*	2.10 x 1.97 x 1.02	0.2	UL/CE/TUV	4.95	4.49	3.95
174115	For 486 CPU*	1.94 x 1.94 x 0.91	0.1	CUL	4.95	4.49	3.95
67660*	For 486 and 586 CPU*	1.94 x 1.94 x 0.91	0.1	CSA/CE/TUV	4.95	4.49	3.95
132097	For 686 and Pentium® 75-166 – square*	2.17 x 1.87 x 1.10	0.1	UL/CSA/CE/TUV	12.95	11.49	9.95
181278	For Pentium® 75-233*	2.08 x 2.05 x 1.57	0.3	UL/CE	9.95	8.95	7.95
174027	For Pentium® II w/ double back tape*	4.90 x 1.22 x 2.21	0.4	CE/TUV	12.95	11.49	9.95
151298	For Pentium® II*	4.90 x 1.32 x 2.16	0.5	UL/CE/TUV	14.95	13.49	11.95
185607	For Pentium® Pro*	2.75 x 2.75 x 1.75	0.4	UL/CSA	14.95	13.49	12.49
180961	For Pentium® Pro (1.0"H)*	3.15 x 2.48 x 1.00	0.2	_	14.95	13.49	12.49

AMECO Fan Plug Cords



· Cord type: SPT-1 (2) conductor black

104192

• Voltage rating: 300V • Fits all terminal fans

• Temperature range: 60°C • Weight: .05 lbs.

Part No.	Description	1	10	100
28564*	Straight 24" fan cord\$1.0)9	\$.89	\$.75
104192	90° angle 24" fan cord1.0)9	.89	.75

Back Panel PC Cooling Fan

- · Type: sleeve axial fan
- Back panel mountable
- · Airflow: 42 CFM
- · Noise ratio: 26 dBa
- Power: 1.8W
- Operating volt .: 12VDC @ 200mA
- 10.5" wire with 4-pin Molex power connector • One-year warranty
- Size: 4.3"L x 3.5"H x 1.1"Thick Weight: 0.3 lbs.
- Part No. Description 10 152240 PC cooler fan\$19.95 \$17.95 \$15.95

2-Ch Super Cooler w/ Back Light

- Fits 5.25" bay
- Operates on CR2032 3V battery (included)
- Requires 12VDC for fans (5.25" drive connectors)
- · Audible overheat alarm
- 5.3 CFM (per fan)
- · Controls two sensors
- · Weight: 0.5 lbs.
- · One-year warranty
- · Size (digital display): 1.86"W x 1.0"H

Size: 6.0"W x 2.4"D x 1.7"H

Optional sensors: P/N 148769 for CPU monitoring Part No. Description 148742 2-channel cooler \$39.95 \$35.95 \$32.49

14.95 | 13.49 | 12.49 | 148769 Sensor (flat type) CPU ...4.95 4.49



148769

148742

The 8052 Microcontroller Idea Book (1997)

· Circuits, programs and applications featuring the 8052-Basic single chip computer (277 pages)

• Size: 7.8" x 10.5" • Weight: 1.6 lbs.

Part No. Description

126375 Microcontroller Idea Book .. \$31.95 \$28.95

Basic-52 Reference Book (1997)

 Complete reference to programming 80C52-Basic and 8052AH-Basic microcontrollers (167 pages) Size: 8.2" x 10.6" • Weight: 1.0 lb.

• 126295: 3.5" disk with circuit examples Part No. Description

126252 Basic-52 Programm. Ref.\$22.95 \$19.95 126295 Basic-52 3.5" disk (MS-DOS) 9.95 8.95

TTL Logic Data Book (1988)

Texas Instruments Contains specifications and technical information on a broad line of TTL integrated circuits including: standard TTL circuits and Schottky TTL circuits. (1240 pages) • Size: 6.0" x 8.5" • Weight: 2.6 lbs.

Part No. Description TTL Logic Data Book......\$34.95 \$31.49 88225

CMOS Cookbook (1997)

Newnes Publishing Everything you need to know to intelligently use CMOS circuits.User-oriented, stresses real-world applications, pays attention to detail, with a minimum of math and heavy theory. (512 pages)

• Size: 5.5" x 8.5" • Weight: 1.3 lbs.

Part No. Description 10 39221 CMOS Cookbook\$26.95 \$23.95

IC Cross Reference Book (1998)

Prompt Publications The most comprehensive replacement and substitution guide available for engineers, technicians, and anyone who works with ICs and modules. The IC Cross Reference book is from the makers of PHOTOFACT® service

documentation. It includes more than 35,000 part and type number listings for the United States, Europe, and the Far East. (152 pages)
• Size: 8.5" x 10.8" • Weight: 0.9 lbs.

Description

124679 IC Cross Reference Book.....\$29.95 \$26.95

IC Design Projects Book (1998)

Prompt Publishing Provides you with information of how a handful of versatile ICs work. It will give you information about TTL and CMOS ICs, how power supplies work, how op amps work and how phase lock loops work. It also includes

schematic diagrams, a step-by-step guide, parts list, and how to test projects such as battery charger, 5-volt power supply, DC motor control, darkroom timer and so on. (261 pages)

• Size: 7.4" x 9.3" • Weight: 1.0 lb.

Part No. Description 153349 IC Design Projects Book......\$24.95 \$22.49

IC Projects Book (1997)

Prompt Publishing IC projects was written for hobbyists and technicians who are interested in projects for integrated circuits - projects that you will be able to breadboard quickly and test easily. (212 pages)
• Size: 6.0" x 9.0" • Weight: 0.7 lbs.

Part No. Description 10 143271 IC Projects Book......\$24.95 \$22.49

ECG® Master Replacement Guide and Software (2000)

Philips ECG® The Guide features approx. 300,000 crosses and hundreds of new devices. New Instant Cross software gives ECG replacement, description, case style, and special notes. (720 pgs)

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126252

• Weight (Guide): 2.3 lbs. 146801: Requires Windows® 3.1/95/98

Description Part No. Master Replacement Guide\$9.95 146819 \$8.95 146801 Instant Cross Software (Win®) 9.95 8.95

Basic Stamp Data Book (2000)

Newnes Publishing - This book covers both the hardware and software sides of the Parallax basic stamp I and II microprocessor operation and design. The basic stamp is built on PC microcontroller hardware and uses PBASIC as its programming language which makes it simple to use and modify even for beginners and versatile enough to solve professional problems. (305 pages) Size: 6.0" x 9.2" • Weight: 0.9 lbs. Part No. Description

Basic Stamp Data Book \$34.95 143651 \$31.49

Programming and Customizing The Basic Stamp and CD-ROM (1998)

McGraw-Hill A comprehensive tutorial on the easy to use BASIC stamp single board computer and a primer on electronics. (284 pages)

· Includes software tools to begin developing PIC applications

Size: 7.4" x 9.0" • Weight: 1.2 lbs.

Part No.__ Description BASIC Stamp Book\$32.95

Handbook of Microcontrollers (1999)

McGraw-Hill Covers topics such as architecture, instruction set for the built-in processor, features and peripherals of the microcontroller and common methods of interfacing microcontrollers with peripheral devices. Supports devices such as PIC MI DS1820, DS1307, 8051, 80C310/320/520, 68HC05C8/705J1A/05P9A. Includes CD-ROM with application building tools, source code examples and manufacturer's data sheets. (861 pages)

• Size: 7.5" x 9.0" • Weight: 3.9 lbs.
 Part No.
 Description
 1
 10

 161832
 Microcontroller Handbook\$44.95
 \$39.95

Programming and Customizing 8051 Microcontroller Book (1999)

McGraw-Hill Provides you with a complete understanding of the 8051 chip compatibles along with all the information needed to design and debug applications. Covers how to use these embedded chips to access and control many different devices. Also includes over 30 experiments and 12 projects, CD-ROM features sorce code and PDF data sheets. (541 pages)
• Size: 7.5" x 9.2" • Weight: 2.5 lbs.

Part No. Description 161402 Programming/Customizing..\$34.95 \$31.49

The Microcontroller Application Cookbook (2000)

Woodglen Press This cookbook is a collection of interface circuits. It is a reference to circuits and interface code that can be customized for more advanced users (248 pages) • Size: 5.3" x 8.6" • Weight: 0.7 lbs.

Part No. Description 181681 Microcontroller Cookbook...\$29.95 \$26.95

PIC'n Techniques Book (1999)

Square 1 Publishing This book describes the unique features of the 8-pin microcontrollers, the use of timer 1 and 2 and the capture/compare/PWM (CCP) module followed by timing, counting and pulse width modulation. (311 pages)

• Size: 8.5" x 11.0" • Weight: 2.0 lbs. Part No. Description

161242 PIC'n Techniques.....

Easy PIC'n (1999)

Square 1 Publishing Learn all about the PIC16C54 & PIC16C84 and apply to the whole line of microcontrollers. This easy-to-use guide teaches assemblers, programming, interrupts, timing/counting and I/O conversion. (160 pages) Size: 8.5" x 11.0"
 Weight: 1.0 lb.

Description Part No. .\$29.95 \$26.95 136645 Easy PIC'n

PIC'n up the Pace Intermediate Guide (1999)

Square 1 Publishing The next book from where Easy PIC'n left off. It includes topics on Op Amps, shift registers, liquid crystal display interface, digital to analog conversions, analog to digital conversions, decimal interface and so on. (269 pages)

• Size: 8.5" x 11.0" • Weight: 1.7 lbs Part No. Description

10 **145736** PIC'n up the Pace...... .\$34.95 \$31.49

Serial PIC'n (1999)

Square 1 Publishing This book introduces serial communications, including synchronous and asynchronous communications. Provides you with a set of serial communications functions and subprograms as well as how to communicate serially with the PICmicro family of microcontrollers. (530 pages)

• Size: 8.5" x 11.0" • Weight: 3.3 lbs Part No. Description

163871 Serial PIC'n \$49.95

Programming and Customizing PIC Book

McGraw-Hill Details the features of the PICmicro® and how to use these embedded chips to access and control many different devices. Shows what happens within the PICmicro® when an instruction is executed and how it interfaces with external devices. Includes

tools for developing applications, sample operating systems, tips to make code development and debugging easier and PCB for proramming (1190 pages)
• Includes CD-ROM and PIC PCB

· Size: 9.2" x 7.3" · Weight: 4.0 lbs.

Part No. Description 183046 PIC Book (second edition) \$49.95 \$44.95

PIC Microcontroller Project Book

McGraw-Hill This book provides you with hands-on directions for putting Microchip's RISC-based chips with up to 8K of memory to work. Starting with simple projects and experiments, this book leads you gradually into sophisticated programming techniques. This book will provide you guidance on:

getting the equipment you need, programming your chip, making your chip count numerically, deliver messages on a LCD display, and so on. (203 pages)

• Size: 7.3" x 9.2" · Weight: 1.0 lb. Part No. Description

174650 PIC Microcontroller Book....\$29.95 \$26.95















Exploring Programmable ICs Book (2001)

Prompt Publications With this book, you'll learn how to bypass this software constraint and operate ICs directly with hardware circuitry on your bench top. In this comprehensive book, you'll find - in practical, well explained detail complete operating set-ups for a variety of programmable devices ranging from



D-A converters to interval timers, universal asynchronous receiver / transmitters (UARTs), peripheral interface adapters (PIAs), and more. (344 pages)

• Size: 7.5" x 9.4" • Weight: 1.4 lbs.

Description Part No. Programmable ICs.....\$34.95 \$31.49

Encyclopedia of Electronic Circuits on CD-ROM

Tab/McGraw-Hill Electrical engineers can turn to this new CD-ROM for an interactive, electronic version of the Encyclopedia of Electronic Circuits. It features 1,000 circuitry drawings from · Weight: 0.5 lbs. the 5-volume set. Fully searchable.

Part No. Description .\$99.95 \$89.95 130500 Encyclopedia CD-ROM

Practical Electronics Handbook

Newnes Publishing A unique book that covers all the key data, facts, practical guidance and circuit design basics needed. This book provides a wealth of clear explanations and practical guidance, making the ideal text for stu-dents and practitioners of electronics who have progressed beyond the basics. (561 pages)



10

• Size: 6.1" x 9.2" • Weight: 1.9 lbs.

Description 175409 Practical Electronics Book ... \$35.95 \$31.95

Understanding Electronics (1989)

TAB Publishing A thorough examination of dozens of components. You'll learn exactly what each one is, what it looks like, what it does, and in what types of circuits it is used. (205 pages) • Size: 7.3" x 9.3" Weight: 0.9 lbs.



LECTROS CO

Description Part No.

73664 Understanding Electronics...\$13.95 \$12.49

Electronic Pocket Reference (Third Edition)

McGraw-Hill Publishing Compact and complete, and featuring formulas, tables and diagrams in place of lengthy text description. The only electronics information you need - in a format you can use. (529 pages)



"REFEREE" Semiconductor Cross-**Reference & Directory Software**

Unmatched cross-reference for hundreds of thousands of ICs, transistors and diodes! Most device searches yield a mind-blowing 75 to 2,000 potential replacements! Get case drawings, lead configuration and pin-outs for many devices and replacement numbers for ECG, NTE, SK and GE. Also includes conversion

four industry directories. DOS version
 Seven 3.5" disks

utilities, formulas, resistor library and

· Minimum system requirements: 386 compatible or better, 4MB RAM, 17MB hard disk space (for complete database installation) and DOS 5.0+

· Easy to install and use · Weight: 0.8 lbs. Part No. Description

144979 Referee Cross-Reference....\$99.95 \$89.95

SMD Electronics Projects

Prompt Publications This book provides 30 electronic projects utilizing SMD (surface mount devices). A fairly new technology, these projects are built with readily available components. Projects include earphone radio, Xtal receiver, short-wave receiver, IC radio, FM radio, LED flasher and so on. (296 pages)

• Size: 6.0" x 9.0" • Weight: 1.0 lbs. Part No. Description 172988 SMD Electronics Projects...\$29.95 \$26.95

Simple, Low Cost **Electronics Projects (1998)**

Technology Publishing Electronics is the art of creating useful devices from components. This book will guide you through step-by-step instructions on how to build, test and pack the projects. With a complete list of components, projects include: inductance and semiconductor testers, a variable frequency audio oscillator, voltmeter,

multimeter, and much more! (216 pages) Size: 8.5" x 11.0" • Weight: 1.2 lbs.

Part No. Description 10 \$17.95 154991 Electronics Projects......\$19.95

Electronics Projects for the 21st Century (1997)

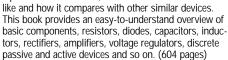
Prompt Publications If you are an electronics hobbyist with interest in science and technology, this book is a welcome addition in your library. Filled with nearly 2 dozen projects such as Geiger counter, laser power supply for Holography, and Pinhole camera. The book includes a brief

history of the project you are about to create, parts list, and schematic diagram. (256 pages) • Size: 9.3" x 7.5" • Weight: 1.0 lb.

Part No. Description **145461** Elec. Proj. for the 21th Cen. **\$24.95** \$22.49

Practical Electronics Book for Inventors

McGraw-Hill Most electronic books deal with formulas and theory, which means practical applications and advice get lost. This book provides you with information needed for practical use in a fomat you can understand. With hand-drawn illustrations, this learn-as-you-go guide shows you what a particular device does, what it looks

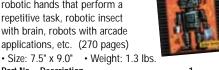


Size: 8.4" x 11" · Weight: 2.8 lbs.

Description 174529 Personal Robots Navigation \$34.95

Robots, Androids and Animatrons (1997)

McGraw-Hill Demonstrates how to put together the latest in robotics technology. Includes projects like robotic hands that perform a repetitive task, robotic insect with brain, robots with arcade applications, etc. (270 pages)



Part No. Description 150498 Robots, Androids & Animatrons \$19.95 \$17.95

Robot Builder's Bonanza (2000)

TAB Publishing This fascinating guide offers you a complete, unique collection of tested and proven project modules that you can mix and match to create an almost endless variety of highly intelligent and workable robot creatures.

(753 pages) • Size: 7.3" x 9.2" • Weight: 1.2 lbs. Part No. Description \$23.95 \$21.45 137171 Robot Builder's Bonanza.

Mobile Robots Book (1999)

A.K. Peters This book guides the reader through the step-by-step process of constructing two different inexpensive yet fully functional robots with different capabilities. This book is also a starting ground for creating robots of your dreams. (457 pages)

• Size: 6.1" x 9.1" • Weight: 1.5 lbs.

Part No. Description 154131 Mobile Robots Book..... .\$39.95 \$34.95

Personal Robot Navigation Book (1998)

A.K. Peters Provides us with the concept and understanding of how robot navigation works, planning the area for placing sensors and other devices for robots to respond to. (199 pages) • Includes 3.5" diskette • Size: 9.2" x 8.0" • Weight: 1.3 lbs.



Description Personal Robots Navigation \$49.95 \$44.95 159821

Data Acquisition Book (1995)

National Semiconductor Data acquisi tion systems, active filters, analog switches and multiplexers, A-to-D and D-to-A converters, sample and hold, temperature sensors, voltage references and surface mount. (958 pages)

• Size: 7.0" x 9.0" • Weight: 3.0 lbs. Part No. Description

41208 Data Acquisition Book\$17.95 \$15.95

Op-Amp Design Book (1996)

Design, Applications and Troubleshooting

Butterworth-Heineman Publishing This book explains the technical details of operational amplifier circuits in clear and understandable language without sacrificing technical depth. Topics are covered at three levels: operational overview, numerical analysis and design techniques. Troubleshooting techniques

use fundamental electronic principles applied in a systematic approach. (488 pages)

• Size: 7.0" x 10.0" • Weight: 2.0 lbs

Part No. Description
134914 Op-Amp Design Book.... .\$54.95 \$49.95

Optoelectronics Book (1997) Volume 1

Prompt Publications If you, or someone you know, has an interest in optoelectronics, this informative book is for you. Written and designed as a self-teaching text, it covers the basic concepts of optoelectronics, photometrics, and optics. (264 pages)

• Size: 10.9" x 8.3" • Weight: 0.5 lbs.

Description 139547 Optoelectronics Book\$32.95 \$29.95

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Electronic Circuit Guidebooks

Prompt Publications:

Volume 1: Sensors (1997)

A practical approach to sensors and the analog interface. Information about typical sensors and analog

sensor circuitry. (339 pages)
• Size: 7.4" x 9.3" • Weight: 1.3 lbs.



Volume 2: IC Timers (1997)

This book will introduce you by way of resistor-capacitor circuits, in-depth chapters on TTL and CMOS IC timers, LM-555 timers, and other IC devices, op-amp timer circuits and so on. It will also give you some samples of circuits.

(240 pages) • Size: 7.3" x 9.3" • Weight.: 1.0 lb. Part No. Description

146966 IC Timers......\$29.95 \$26.95

Volume 3: Op Amps (1997)

The most commonly used linear IC amplifier in the world, the range of applications varies from audio, communications, TV, broadcasting, instrumentation, control and measurement circuits. It allows you to design and

configure your own circuit, and is intended to be a practical aid. Topics in this book include: instrumentation amplifiers, solid state audio circuits, waveform generators and timer circuits, isolation amplifiers

and many more. (273 pages)
• Size: 7.5" x 9.3" • Weight: 1.1 lbs.

Part No. Description 10 \$29.95 \$26.95 146974 Op Amps.

Volume 4: Electro-Optics (1997)

This book is about E-O (Electro-Optics) sensors - those transducers that convert light waves into proportional voltage, current, or resistance. The coverage is wide enough to let you understand the basics of the operation

of the device as well as the circuitry used to make these operate. It examines the photoelectric effect, photoconductivity, photovoltaics, and PN junction photodiodes and phototransistors. (406 pages)

Size: 7.5" x 9.3"
 Weight: 1.5 lbs.

Part No. Description 147272 Electro-Optics Book...... .\$29.95 \$26.95

Volume 5: Digital Electronics

A book about the basics of digital electronics. It is not a computer book, but a book about the fundamental circuits that make up not only computers, but all digital products. It takes a look at logic gates, flip-flops, counters and

the ways they are combined to make practical circuits. It will also provide information on number systems, counters, display and decoder devices and more. (234 pages) • Size: 7.4" x 9.3" • Weight: 1.0 lb.

Part No. Description 10\$29.95 \$26.95 169560 Digital Electronics......

Electronic Surveillance Devices Book (1999)

Newnes Publishing A good reference book of theoretical principles and practical applications on security and surveillance. Includes actual circuit diagrams and construction techniques of transmitters, recording switches and counter surveillance devices. (112 pgs.)
• Size: 6.0" x 9.3" • Weight: 0.5 lbs.



Part No. Description 10 147184 Electro. Surveillance Device \$39.95 \$35.95

Teach Yourself Electricity and Electronics Handbook (1997)

McGraw-Hill Assuming that you do not have any background in electronics, this book features conversational writing style, quizzes, self-tests and illustrations that make learning easier. You will be able to design basic electronic circuits, determine waveform

combinations, calculate power and impedance, etc. (659 pages) • Size: 7.5" x 9.3" • Weight: 3.0 lbs. Part No. Description

Teach Yourself Electricity.....\$34.95 \$31.49

Understanding Telephone Electronics (1997)

Newnes Publishing Describes how conventional telephone systems operate and how digital electronics replace them. Provides an overview of state-of-the-art speech, circuits, dialing, ringing, and central office electronics. Provides an in-depth review of modems

and digital technique transmissions. (367 pages) • Size: 7.4" x 9.3" · Weight: 1.4 lbs.

Part No. Description Understanding Tele Electronics \$24.95 \$22.49

Telephone Project Book (1998) for Electronics Experimenters

Prompt Publications Includes projects such as 16-channel DTMF controller, automatic bell, automatic tape controller switch, hands-free headset telephone and long distance call restrictor. (205 pages)

• Size: 7.5" x 9.0" · Weight: 0.9 lbs. Part No. Description

159783 Telephone Project Book.. \$29.95 \$26.95

Laser Design Toolkit (1999)

Prompt Publishing The Laser Design Toolkit will introduce you to this fascinating field, including history, fundamentals and safety, beam modulation and 2-way communication. It will also help you complete exciting projects, like building your first HeNe laser and power supply, working with

optics, constructing a laser light show, processing holograms, building a laser light meter and laser based alarm systems, working with laser diodes and more! (223 pages)

• Size: 7.4" x 9.2" • Weight: 1.0 lb.

Description 168567 Laser Design Toolkit\$29.95 \$26.95

Electric Motors and Control Techniques

TAB Publishing Explains how different types of motors operate, and how electronic control devices can be used to improve efficiency in a wide range of applications. (294 pages) • Size: 7.3" x 9.2" • Weight: 1.1 lbs.

Part No. Description 137162 Electric Motors & Control...\$24.95 \$22.49

Power Supplies Project Book (1997)

Prompt Publications Guides you through the fundamentals of power supplies to design and construction of a power supply system. Includes basics of AC and DC, regulated and unregulated, linear and switching and more. (124 pages)

• Size: 6.0" x 9.0" • Weight: 0.4 lbs. Part No. Description

145453 Power Supplies Project Book \$19.95 \$17.95

Making Your Own **Printed Circuit Board (1999)**

JV Enterprises No darkroom needed or special equipment. Shows you the steps for drilling and shaping your printed circuit board and the materials you will need. (91 pages)

Size: 8.5" x 11"
 Weight: 0.5 lbs.

Part No. Description 141524 Making PCBs Book\$14.95 \$13.49

How to Test Almost Everything Electronic (1993)

TAB Publishing Filled with easyto-follow instructions that show you how to troubleshoot all types of electronic systems. Learn the many uses of electronic tools and test equipment and systematic troubleshooting using flowcharts. (326 pages)

 Size: 7.4" x 9.3" · Weight: 1.3 lbs.

Part No. Description **126199** How to Test Everything......\$14.95 \$13.49

Complete Book of Oscilloscopes (1992)

TAB Publishing Provides an in-depth reference source and practical applications guide. Photographs of different types of oscilloscopes as well as how to read signals are provided in this handbook. Gives you detailed schematic diagrams of types of oscilloscopes. 2nd edition. (305 pages) • Size: 7.5" x 9.1" • Weight: 1.2 lbs.

Part No. Description

147192 Complete Book of Oscillo. ..\$24.95 \$22.49

Troubleshooting and Repairing Consumer Electronics Without a Schematic (1997)

TAB Publishing Learn how to locate, test, and repair defective components in audio amplifiers, car radios, cassette decks, TV chassis, compact disc players, power supplies, AM/FM receivers and VCRs. (475 pages) Size: 7.4" x 9.3" • Weight: 1.1 lbs.

Part No. Description 136080 Consumer Electronics......\$24.95 \$22.49

Video Scrambling and Descrambling for Satellite and Cable TV (1998)

2nd Edition

This book is for the commercial and hobbyist fields to increase the awareness of the many non-video opportunities in the satellite communications field. (292 pages) • Size: 8.5" x 11.0" • Weight: 1.3 lbs.

Part No. Description

136442 Video Scram & Descrambling \$29.95 \$26.95

PC Hardware Projects Vol 2 (1997)

Prompt Publications If you have always wanted to work with stepper motors and need a setup to drill your own PC boards quickly and accurately, this is the book that will help you. Includes companion disk.(222 pages)

 Size: 7.8" x 9.3"
 Weight: 1.0 lb. Part No. Description

143280 PC Hardware Projects Vol 2 \$29.95 \$26.95

PC Hardware Projects Vol 3 (1998)

Prompt Publications Instructs how to design a test and measurement device that connects to a PC digital I/O card. Explains how to export stored data. Includes companion disk. (204 pages)

• Size: 7.4" x 9.0" • Weight: 0.9 lbs. Part No. Description

151896 PC Hardware Projects Vol 3 \$29.95 \$26.95





Pocket PC Reference (1998)

POCKET

Parallel Port

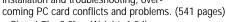
Sequoia Publishing

- · Full DOS 6.22 and earlier command reference · ASCII and Hex codes
- · Hard disk specs and configuration data on over 3200 drives
- · Hardware and software interrupts
- · Expanded PC industry phone book with over 3,500 main and tech support phone numbers • Modem settings
- PC error codes Cable and connector pinouts
- I/O and memory maps Video scan frequencies

• 576 pages • Size: 3.3" x 5.4" · Weight: 0.3 lbs. Part No. Description Pocket PC Reference\$13.95 \$12.49 76806

Drive and Memory **Troubleshooting Pocket Reference**

McGraw-Hill Contains information about the newest memory technologies along with helpful tips and techniques for selecting, installing, optimizing and troubleshooting which are all applicable to all PC computer systems. Provides information such as maintaining peak hard drive performance, DVD-ROM drive installation and troubleshooting, over-

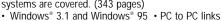


• Size: 4.7" x 8.0" • Weight: 1.2 lbs.

Part No. Description 173201 Troubleshooting book \$17.95 \$15.95

Parallel Port Complete (1999)

Lakeview Research A practical, hands-on approach for users of PCs and their connections to parallel ports. This state-of-the-art book offers many new tips on how to get the most out of your parallel port. New enhanced (EPP) and extended capabilities (ECP) types that are found on most new systems are covered. (343 pages)



· How to select cables · Includes 3.5" software disk · Weight: 1.4 lbs. · Size: 7.0" x 10.0"

Part No. Description

138261 Parallel Port Complete w/ SW ... \$39.95 \$35.95

Serial Port Complete (1998)

Lakeview Research RS-232 and RS-485 are the most versatile, inexpensive interfaces for linking, but their hardware and programming are often misunderstood. This book will provide you with everything you need to design, program, install and troubleshoot the links you set up. (306 pages)



• Size: 7" x 10" • Weight: 1.3 lbs. Part No. Description

154771 Serial Port Complete Book...\$39.95 \$35.95

Troubleshooting and Repairing **Computer Printers (1996)**

TAB Publishing Throughly revised and updated, this book gives you specific maintenance and repair techniques. Includes 150 symptoms and solutions; uses flow charts and detailed schematics for troubleshooting and repairs. You will also learn about common printing problems under Windows® and Windows® 95. Includes companion disk offer.

(472 pages) • Size: 7.3" x 9.2" • Weight: 1.8 lbs. Part No. Description 10 133209 Computer Printers.....\$27.95 \$24.95

Troubleshooting and Repairing **Computer Monitors (1997)**

TAB Publishing CRT alignment and degaussing; state of the art plasma displays; specs. and architectures of monochrome, CGA, EGA, and VGA monitors; supports both CRT and LCD monitors (298 pages)

· Weight: 1.5 lbs. · Size: 9.5" x 7.5"

Part No. Description 123764 Troubleshooting Monitors.....\$24.95 \$22.49

CD-R / DVD Disk Recording Book (2000)

McGraw-Hill Includes topics such as creating and replicating discs inexpensively without errors, techniques for digitally recording music, video and multimedia, understanding CD-R and DVD, creating content quickly using tools and applications. Includes CD-ROM with trial software. (528 pages) • Size: 7.2" x 9.4" • Weight: 2.2 lbs.

Part No. Description 175231 CD-R/DVD Disc Recording .. \$44.95 \$39.95

Everything You Need To Develop Custom USB Peripherals Book

Lakeview This USB complete book was designed from the ground up to provide easy-to-use interface for computer peripherals. The book covers topics such as what USB can do, transfer types, chip choices, what's inside a USB controller, writing firmware, how the host communicates

 Includes CD-ROM and more. (396 pages) • Size: 7.0" x 9.0" · Weight: 1.5 lbs.

Part No. Description 171900 Complete USB Book\$49.95 \$44.95

Bigelow's Build Your Own PC Pocket Reference (1998)

McGraw-Hill Tells how to build your own PC from choosing your components, assembling the unit in an orderly manner, testing the system, troubleshooting, taking advantage of upgrades, and installing and optimizing Windows® 95. Also includes an appendix of PC acronyms. A must for students and computer users. (273 pages)

 Size: 4.7" x 8.0"
 Weight: 0.7 lbs. Part No. Description

151829 Build Your Own PC\$19.95 \$17.95

Build Your Own Pentium® II (1998)

McGraw-Hill A complete guide book to building your own Pentium® II. Also includes step-by-step instructions on how to upgrade old computers to Pentium® II technology systems and much more! (535 pages)

Size: 7.4" x 9.3" • Weight: 2.4 lbs.

Part No. Description 153357 Build Your Own Pentium® II....\$27.95 \$24.95

Controlling the World with Your PC (1994)

Hightext Publishing Make your PC control stepping motors, monitor fluid levels, or switch appliances on and off! Each of the circuits in this book connects directly to the parallel printer port of your PC and comes complete with a circuit diagram and listings for control software written in Pascal, C and

BASIC. Applications include: generating audio and speech tones converting input voltages to binary values, driving high power loads and DC relays, and converting DTMF to binary values. (257 pages)
• 3.5" disk is included • Size: 8.5" x 11" • Weight: 1.5 lbs.

Part No. Description 116943 Controlling the World w/ Your PC \$32.95 \$29.95

Upgrading and Repairing PC's (1999)

SAMS Publishina Ideal for individuals who want an in-depth understanding of IBM and compatible computers. Contains technical specifications, information, and guidelines for upgrading and repairing all Intel Pentium® and compatible systems. (1628 pages) · Includes CD-ROM

• Size: 7.4" x 9.0" · Weight: 4.1 lbs. Part No. Description

Upgrading & Repairing PC's \$59.95 \$53.95

Oscilloscope Guide Book (2001)

Prompt Publishing - This book brings to life, with full illustrations and diagrams, oscilloscopes and how to utilize them in many useful electronic tests and measurement techniques. This book answers questions about various types of oscilloscopes and how to obtain useful test

29284

results on a variety of electronic devices. (214 pages) • 7.5" x 9.2" · Weight: 0.9 lbs.

Part No. Description 185404 Oscilloscope Guide Book...\$29.95 \$26.95

Modern Electronics Soldering Techniques Book (2001)

Prompt Publishing – Soldering is an essential component of any electronics project. The traditional notion of soldering no longer applies in the quickly changing world of technology. This book covers anything and everything needed to learn the art of electronics soldering. The author goes beyond the basic aspects of

soldering and thoroughly discusses the other areas of electronics technology such as correct handling and identification of components, reading and converting schematics and familiarity with test concepts and so on. (293 pages)

• 6.0" x 9.0" Weight: 1.0 lbs. Part No. Description

185498 Modern Electronics...... .\$24.95 \$22.49

Applied Robotics Book (2001)

Prompt Publishing - The book is designed to give the beginner a thorough and complete introduction into the filed of robotics with simple projects and easy-to-read explanations. Detailed and extensive schematics, programs, and descriptions guide you through challenges of building a working robot. Includes CD-ROM. (311 pages)

 7.4" x 9.2" · Weight: 1.3 lbs. Part No. Description

185501 Applied Robotics Book\$29.95

Now an easier way to get real time information

• Up to the Minute Pricing and Inventory Information

Order Tracking

Technical Support

 Product Information and **Photographs**

New and Special Product Offers

www.jameco.com

We carry major manufacturers - call for pricing on quantities over 25.

CircuitMaker2000

125591/139301

142973

142981

CircuitMaker® (Version 6.0) and TraxMaker Software (Version 3.0)

System requirements: IBM or higher compatible, 32MB of RAM, 20MB of hard disk space, CD-ROM drive, VGA card or higher compatible, mouse

125591: CircuitMaker

- · Professional schematic design software that uses SPICE based simulation to simulate analog, digital and mixed-signal circuits
- · Library of 4,000 plus device models
- · 6 analysis and 8 virtual instrument functions
- · Tightly integrate with Traxmaker (P/N 139301)

139301: TraxMaker

· Professional PCB layout program with no auto router

• Use with CircuitMaker (P/N 125591) for a complete design system · Supports up to 8 layers

· Multi-pass gridded auto router

· Output gerber files, NC drill files Fully documented library of 2,000 footprints

· Prints to any Windows - selectable printer/plotter

· Import PCB netlists in CircuitMaker, Protel or Tango formats

Part No.	Description	Wt. (lbs.)	1	5
125591	CircuitMaker® Simulation Software	1.6\$2	279.95	\$259.95
139301	TraxMaker Simulation Software	2.7	279.95	259.95

WinBOARD PCB Layout / WinDRAFT Schematics Software

 Minimum system requirements: 486/DX2, 10MB hard drive space, 8MB RAM, SVGA (800 x 600)

Support up to 450 pin designs

142973: WinBOARD PCB Layout Software

 Supports 16 layers with multiple copper pours 142981: WinDRAFT Schematics Software

...still one of the most flexible, best featured, and economical schematic capture programs on the

market suitable for professional use. — Desktop Engineering						
Part No.	Description	Wt. (lbs.)	1	10		
142973	WinBOARD Electronic PCB CAD	1.6\$	149.95	\$134.95		
142981	WinDRAFT Electronic Schematic CAD	1.6	.149.95	134.95		

EDWin NC / EDWin 2000 Electronics CAD/CAE Software

A special license for home users, students, educational establishments and businesses wishing to evaluate the system.EDWin runs in Windows® 9X/NT and is fully integrated.

· System requirements: 486 or higher compatible, Windows® 9X/NT, min.100MB hard drive space, 16MB of RAM, SVGA color monitor, graphics controller card and mouse

· Library editor: 15,000+ device models library

· Mixed-mode simulation: diagram generator

· Schematic capture: autorouting, autopackaging and autocheck

• Postprocessing: Gerber 274D, 274X, NC drill, pick and place

· Layout design (28 layers): autorouting, autoplacement and autocheck

P/N 181892: 500 device library: 100 component database

1714 101002. 500 device library, 100 component database							
Part No.	Description 1	5					
163045	EDWin NC V1.70 Upgrade\$34.95	\$31.49					
181892	EDWin 2000 Basic299.95	279.95					
182001	EDWin EDSPICE module (for P/N 181892) 89.95	80.95					
181981	EDWin thermal analyzer (for P/N 181892)34.95	31.49					
181999	EDWin auto-router (for P/N 181892) 59.95	53.95					

© SPECIALTIES Protolab 4.0 Software

A low-cost circuit design and simulation software designed for Microsoft® Windows® 95. Create and edit analog circuits on your PC while you choose from a list of active and passive components. Includes pre-designed circuits and analysis tool such as...oscilloscope, voltmeter, ammeter, ohmmeter or watt meter.

 System requirements: IBM PC 386; 4MB RAM, SVGA graphics, Windows® 3.1 or 95 • Includes 3.5" diskette and basic instructions

Part No.	Description	Wt. (lbs.)	1	10
150682	Protolab 4.0 Software	0.06	\$49.95	\$44.95

micro Engineering Rabs EPIC Pocket

PIC Programmer Plus

The pocket-sized EPIC Plus Programmer quickly and easily programs most PICmicro microcontrollers. Basic programmer includes an 18-pin socket for programming 8, 14 and 18-pin PICmicro MCUs. ZIF adapters also available.

Simple hardware installation with parallel-port (printer) interface

Interactive software for Windows 9x/NT/2000 and DOS

 Command line operation for automated, non-interactive programming PICmicro Macro Assembler software included

· Requires two 9V batteries or AC adapter

Part No.	Description	Wt. (lbs.)	1	10
132679	EPIC pocket PIC programmer	0.20	\$59.95	\$53.95
136397	8/18-pin ZIF adapter	0.07	34.95	31.95
132610	40/28-pin ZIF adapter	0.10	34.95	31.95
154763	In-circuit programming adapter	0.08	59.95	53.95

micro Engineering Rabs PICBasic

Compiler and PICBasic Pro Compiler

PICBasic converts your BASIC programs into files that can be programmed directly into a PICmicro MCU. Compatible with most PICmicro MCU programmers.

• Use in DOS or Windows® • In-line assembler and Call support

PICBasic Compiler:

 Serial speeds to 9600 baud
 May use up to 2K of code space
 PICBasic Pro Compiler:
 Direct and library routine access to any pin or register Automatic page boundary handling past 2K

 Built-in LCD support MPLAB / MPASM / ICE compatability

Part No. Description 132661 PICBasic compiler: Basic Stamp 1 compat. instruction set \$89.95 \$79.95 150543 PICBasic pro compiler: Basic Stamp 1 & 2 compat. inst. set 239.95 214.95

micro Engineering Rabs PICX1

Experimenter's Module Board Pre-assembled experimenter's platform that provides an assembled testbed containing most of the circuitry commonly used with MCUs.

Includes: 40-pin ZIF socket, 5V regulator, 16 switch key-pad, reset button, jumper selectable oscillator from 4MHz to 20MHz, (3) potentiometers, LED bargraph, 2 line x 20 character LCD module, speaker, (2) RC servo connectors, RS232 interface, RS485 interface socket, 12C

serial EEPROM socket, SPI serial socket, real time clock/serial analog to digital converter socket, Dallas 1620/1820 temperature IC socket, EPIC in-circuit programming connector and wiring for Microchip in circuit debug connector

					_
176903	PIC-X1K Experimenter/Lab Board Kit	—	139.95	132.	95
169113	PIC-X1 Experimenter/Lab Board	5.4 x 5.6	\$199.95	\$189.	95
Part No.	Description	Size (L" x W")	1		5

micro Engineering Rabs

"PICProto" Prototyping Boards

- High quality blank prototyping boards for PiCmicro microcontrollers
- Large prototyping area
- Holds microcontroller, 5V regulator, oscillator, capacitors and DB9-25 connector
- · Includes documentation sheet with schematic, suggested parts and placement Part No. Description Size (L" x W") Wt. (lbs.) 132636 PICProto 3 \$13.49 3.0 x 3.0 0.1.....\$14.95

• For 8 pin PIC12C508/509/671/672 • Solder mask

136400 PICProto 8 \$7.95 2.0 x 1.2 For all 18-pin PICs including PIC16C52, 54, 56, 58, 554, 558, 61, 620, 621, 622, 71, 710, 711, 712, 715, 716, 84, 16CE623, 624, 625, 16F627, 628, 83, and 84

0.03.....**\$9.95** 132644 PICProto 18 3.0 x 1.5 176891 PICProto 18L 3.6 x 4.1 17.95

 For 18-pin PICs including PIC16C84 and 16F84 Includes wiring for 2 DIP switch banks, resistors and socket to jump to a solderless breadboard

150535 PICProto S1 2.1 x 1.9 0.02.....**\$14.95** \$13.49

• For both 18-pin PICs including PIC16C52, 54, 56, 58, 554, 556, 558, 61, 620, 621, 622, 71, 710, 711, 715, 83, 84 and 28-pin PIC16C55 and 57

Accepts either standard 0.6"W 28-pin device or 0.3"W skinny DIP 132628 PICProto Dual 18/28 3.0 x 3.0 0.05.....\$14.95 \$13.49 For 40-pin PIC16C64, 65, 67, 74 and 77

132652 PICProto 64 0.1.....\$16.95 \$14.95 4.0 x 3.0





132661

JAMECO Solderless Breadboards and Accessories 108

Jameco's long-lasting breadboards feature screen printed color coordinates suitable for many types of prototyping and circuit design. Larger models feature a heavy-duty aluminum backing with binding posts. Use Jameco's AC/DC breadboard power supply for both digital and analog circuit requirements. P/N 77681 (See page 109)

- · Accepts most electronic components including integrated circuits and transistors for digital and/or analog circuitry
- · Pins are identified by numbered rows and columns
- · Ideal for high frequency and low noise circuits
- 0.1" hole spacing One-year warranty
- · WBU5 and JE series do not interconnect

JE Series Key Features:

- Low static, plastic body CMOS safe
- · Nickel plated clips designed to withstand up to 5,000 insertion cycles
- · Breadboard strips connect together to form larger working areas
- Components are easily interconnected using 20-28 AWG wire (see 19289 & 20079 - below)
- Use to breadboard and debug circuit designs
- · Some models feature heavy-duty aluminum backings



WBU5 Series Key Features:

for handy operation

connection better

Horizontal assembly corresponds to the

operation flow design of the PC boards

Round hole design makes the electric

Formed with V-shaped cross-sectional

of utilization due to small pitch

groove, which allows DIP IC pins inserting

Dovetail protrusions and recesses designed

to connect two adjacent tightly together

across two parts and to increase the rate

Attention Educators!

Buy jumper wire in bulk

and SAVE!

(see Hook-up Wire on page 67)



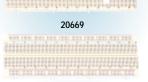




20811



94457





136901



Part	Product	Terminal	Bus	Contact	Binding	Breadboard	Baseplate	Weight		Pricing		
Number	Number	Strips	Strips	Points	Posts	Size L x W (In.)	Size L x W (In.)	(lbs.)	1	10	50	100
94457	JE19	0	1	100	0	6.5 x 0.4	_	0.04	\$1.95	\$1.75	\$1.49	\$1.25
20600	JE21★	1	2	400	0	3.3 x 2.1	_	0.13	5.29	4.69	4.29	3.79
20669	JE22★	1	0	630	0	6.5 x 1.4	_	0.20	5.29	4.69	4.29	3.69
20722	JE23★	1	2	830	0	6.5 x 2.1	_	0.30	8.49	7.49	6.75	5.95
20757	JE24★	2	1	1,360	2	6.5 x 3.1	8.5 x 4.0	0.60	12.95	11.95	10.95	9.95
20773	JE25★	2	4	1,660	3	6.5 x 4.3	8.5 x 5.1	0.80	18.95	16.95	14.95	13.95
136901	WBU504	2	3	1,600	4	5.5 x 5.5	7.4 x 6.3	0.90	22.95	20.95	18.95	16.49
20790	JE26★	3	5	2,390	4	6.9 x 5.8	9.1 x 6.9	1.10	23.95	21.95	19.95	17.95
20811	JE27★	4	7	3,220	4	7.3 x 7.5	9.5 x 8.3	1.40	31.95	28.95	26.95	24.95

Part No.	Description	1	10	25
77825	Breadboard pin to breadboard pin test leads (20 pk), color coded 4 each (red, yellow, blue, black, white), 20 AWG wire, 5.9"L (15cm)	\$11.95	\$10.95	\$9.95

JAMECO Wire Jumper Kit (350 pc.)

- · 25 each of lengths 0.1 through 5.0 (14 sizes)
- 350 assorted lengths in 13 colors
- Pre-stripped/ preformed 22 AWG solid wire jumpers



19289: 350 pieces wire jumper kit

- · Handy, durable, clear plastic case · Weight: 0.5 lbs. 20079: 350 pieces refill for 19289
- Case not included · Weight: 0.2 lbs. Part No. Description 10 50 Wire jumper kit\$10.49 \$9.49 \$8.49 \$7.49 20079★ Refill for 19289....8.95 7.95 6.95 6.25

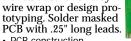
IAMECO Reinforced Jumper Wires

- · 24 AWG-300 volts
- · Reinforced pin ends for durability
- 10 pack assortment: (2) yellow, (2) white, (2) red, (2) black, and (2) blue



 Weigh 	nt: 0.04 lk	OS.	126341				
	Product						
Number	Number	(mm / inch)	1	10	100		
126359	JW50	50 / 1.97	\$3.95	\$3.49	\$2.95		
126341	JW100	100 / 3.94	4.09	3.65	3.09		
126324	JW200	200 / 7.87	4.25	3.75	3.25		

PLCC socket mounted on a circuit board for easy



- · PCB construction
- Silk screen numbers identify pin numbers in groups of 5 and 10
- Tin plated PLCC connector
- · PLCC socket identifies pin 1 and orientation key
- PLCC socket slotted for PLCC chip remover
- Gold plated round pins

i dit ito.	1 1113	OILC (L X VV)		10	100
73533	28	1.4" x 1.1"	\$5.95	\$5.35	\$4.95
73541	44	2.3" x 1.6"	9.95	8.95	7.95
73550	68	3.4" x 1.6"	14.95	13.49	11.95
73568	84	4.3" x 1.9"	19.95	17.95	15.95

· Weight: 0.1 lbs. Part No. Pins Size (L x W) 10

73550

ams PCI Bus Extender Card

- Extends life of motherboard connectors
- Gold plated finger for long life
- Size: 5.9"L x 5.4"W · Weight: 0.4 lbs.
- **141381** PCI bus extender card\$69.95

JAMECO PLCC Prototype Adapters BestProto ISA Prototyping Board AT/ISA Protoboard

- · Can accommodate a PGA package with a 31x31mm footprint
- (21) 1206 surface mount bypass capacitor sites and (142) unconnected sites
- Includes signal definition chart
- Size: 8.2"L x 4.2"W · Weight: 0.2 lbs.

Part No. Description 10 136469 AT/ISA protoboard..\$29.95 \$26.95 \$23.95 **TIME** PCI Bus Prototype Board

· All plated

- through holes
- 50 Mil power
- and ground

\$59.95



- Provision for wire wrap and bypass caps
- Impedance matched to bus specifications
- Easy access to every signal on the bus

• Size: 12.4"L x 5.0"W Weight: 0.6 lbs. Description

PCI prototype bus board.... \$59.95 141372 ..\$69.95



JAMECO Digital-Analog Lab

Solderless **Breadboard**

2712 interconnected nickel plated tie points, fitting all DIP sizes and all components with solid leads AWG #22-30 (0.3-0.8mm)



DC Power Supplies

Input power: 120/220VAC; 50/60Hz (switchable) Variable DC output: 0 to +15V & 0 to -15V @ 500mA Fixed DC output: +5VDC, 1A; -5VDC, 300mA **Function Generator**

Frequency range: 1Hz-10Hz, 10Hz-100Hz, 100Hz-1kHz, 1kHz-10kHz, 10kHz-100kHz

Sine wave output: 0-8 Vpp variable Triangle wave output: 0-6 Vpp variable Square wave output: 0–8 Vpp variable

Other features:

- (2) variable resistors: VR1=1KΩ, VR2=100KΩ
- (8) data switches 2.5" dia. 8Ω /.25W speaker
- (2) pulse switches (2 sets of output: Ā, A, B, B)
- (2) banana sockets, (2) BNC jacks
- (1) 2 segmented LED displays (digit height: 0.3")
- (8) red LEDs with separate input terminals
- Includes power cord and manual One-year warranty
- Size: 12.8"W x 9.8"D x 3.7"H · Weight: 8.5 lbs.

Part No. Description 136266 Digital-analog lab \$359.95 \$323.95 \$292.95

RMY III M1 Engine Serial DAC Interface

- · Easy to use ASCII commands
- 24 digital I/O, TTL compatible
- · Fits on a breadboard for prototyping data
- acquisition and control projects Embedded functions including PWM, period
- measurement and stepper motor control
- · 32-bit DLL and OCX for rapid application development

Part No. Description 127204 Serial port DAC interface kit..\$49.95 \$44.95

RMY II M2 Engine Serial DAC Interface 24 – digital I/O,

- TTL compatible
- · Serial port connection: RJ-45 (8P8C)
- · Serial interface: RS232 (9600 to 115200)
- software selectable
- · Serial peripheral interface port: 3-wires (serial clock, data input, data output)
- · Analog to digital converter: 2 channels, 0 to 5V, 10-bit
- · Fits breadboards for prototyping data acquisition, and control projects
- · To send or receive data in either decimal, hexadecimal, or binary formats
- Period measurement between 50 and 100,000
- · Includes 3.5" manual and demo software on 3.5" diskette and interface cable with adapter
- Size: 4.6"L x 1.1"W
 Weight: 0.5 lbs.

173382 Compukit for breadboards...\$69.95 \$62.95

JAMECO Powered Project Board

- · Back panel has ground terminal
- Outputs are short circuit protected
- Model EP-3 edge plate for non-DIP size components
- Solderless breadboard with 2420 tie points
- DC power supplies: +5V @ 1A, variable power 0 to +15VDC and 0 to -15VDC @ 500mA
- · Input power: 120/220VAC; 50/60Hz (switchable)
- Replacement fuse: P/N 103907 (pg 83)
- Includes power cord Power switch with light

International

120/220VAC

Switchable

- Breadboard size: 7.4"L x 6.8"W
- Box size: 9.8"L x 8.0"W x 2.6"H
- Weight: 6.8 lbs. One-year warranty

Part No. Description 136258 Powered breadboard .. \$99.95 \$89.95 \$79.95

JAMECO 8/16-Bit Solderless Plug-In Breadboard (JE604)



- · IBM PC/XT and higher compatible
- 62 data I/O lines and a DB25 connector Easy PC/XT/AT for interfacing to peripherals Prototyping!
- External DB25 female connector
- 24 14-pin IC capacity
- Clearly labeled bus lines 2,352 contact points
- Size: 13.8"L x 5.0"W
- · Durable construction · Weight: 1.0 lb.

One-year warranty Part No. Description

81672 8/16-bit breadboard \$59.95 \$49.95 \$44.95

JAMECO DC to 50MHz Wideband Prototype Board

Ideal for engineering labs!

This 2nd generation solderless board is ideal for high speed low noise analog and mixed signal circuits. Useful



for testing of instrumentation, signal conditioning, and acquisition circuits.

- · Low inductance grounding system and power line decoupling circuits for operation over 50MHz
- Four dedicated ground buses and four uncommitted bus lines
- · Eight BNCs for signal and power connections
- Side rails for added connectors and power devices and switches
- Working area: 6.5" x 4.3" with 1660 holes (0.1" spacing) • Includes cover
- SOIC/DIP and microprocessor/ DIP adapters available • Size: 7.4"L x 5.1"W x 1.5"H
- One-year warranty · Weight: 1.2 lbs.

Part No. Description 132177 Wideband protobrd...\$59.95 \$53.95 \$48.95

JAMECO Digital Lab



Solderless Breadboard

1580 interconnected nickel plated tie points, fitting all DIP sizes and all components with solid leads AWG #22-30 (0.3-0.8mm). Horizontal layout.

DC Power Supplies

All DC power supplies equipped with short circuit protection

Variable DC power: 0 to +15V and 0 to -15V \pm 5VDC power supply: 5V \pm 0.25V (no load to full load)

maximum output current 1 amp -5VDC power supply: $-5V \pm 0.25V$ (no load to full load) maximum output current 0.1 amp

Two 7-Segment Displays (digit height: 0.3")

Common cathode operation Function Generator (5 ranges)

Frequency range: 1Hz-10Hz, 10Hz-100Hz,

100Hz-1kHz, 1kHz-10kHz, 10kHz-100kHz

Sine wave output: 0-8 Vp-p variable Our most popular Triangle wave output: 6Vp-p fixed

Square wave output: ±5V fixed Digital Voltmeter (DVM) 4 ranges

digital lab! 3 1/2-digits LED display (digit height: 0.3") 0-199.9V, 0-19.99V full scale

- 0-1.999V, 0-199.9mV full scale Input AC voltage: 115VAC/220VAC; 50/60Hz –
- switchable underneath digital lab Size: 10.6"W x 13.3"D x 5.0"H (back panel)
- One-year warranty Wt: 8.1 lbs. Digit height: 0.3" Part No. Description Digital lab\$279.95 \$249.95

Compatible International Cords

- For P/N 75838, 77681, 136258 & 136266
- · See page 72 for complete specifications

Part No. Country		1	10
174633	UK/Ireland	\$5.95	\$5.49
117911	Europe	4.25	3.75
172195	Italy	3.49	2.95

AC/DC Power Supply for Breadboards

With built-in short-proof regulated power supplies.

- · Indicator lamps and power fuses
- Just plug-in and start to use
- Compact and lightweight
- For both digital
- 12-6-0-6-12 tapped VAC, 300mA fixed and analog circuits · Color: beige
- Input power: 120/220VAC; 50/60Hz (switchable) · Compatible w/ test leads International
- P/N 77841 (pg 144) • Size: 7.4"W x 5.5"D x 2.6"H

• Weight: 5.5 lbs. • One-year warranty

Part No. Description

77681 Power supply......\$119.95 \$109.95 \$99.95





120/220VAC

00000

Output Specifications:

0 to +15VDC @ 500mA variable

0 to - 15VDC @ 300mA variable

+5VDC @ 1A; -5V @ 300mA fixed

JAMECO Enclosures, Cabinets and Rubber Feet 110

100255

11826

AMECO Plastic Fliptop Boxes

Includes removable spacers that can be used to divide the box.

· Color/materials: clear plastic box with a clear plastic lid

100255: Size: 8.4"L x 4.5"W x 1.4"H

· Includes dividers for up to 18 (1.4" x 1.5" each) compartments

148902: Size: 10.2"L x 4.7"W x 1.6"H · Includes dividers for up to

12 (1.7" x 2.3" each) compartments

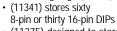
Part No.	Description	Wt. (lbs.)	1	10	100
100255	Fliptop box	0.3 \$1	.95	\$1.75	\$1.39
148902	Fliptop box	0.5 3	.95	3.49	2.95

11375

III Bug Boxes

· Anti-static plastic

· Fits in bug cage (11332)



· (11375) designed to store components

· Color: blue · Weight: 0.11 lbs.

• Box size: 4.9"L x 3.3"W x 0.6"H

Part No.	Description 1	10	100
11341	Fixed: 30 individual comp. \$3.95	\$3.49	\$2.75
11375	Adjustable: 3 comp./6 vertical and 6 horizontal dividers4.49	3.95	3.49

ⅢIII Bug Trays

 Fits in bug cage (11332) · (11826) Open:

1 compartment 4.6"L x 3.2"W x 0.4"H

· (11800) Horizontal: 10 compartments 3.2"L x 0.4"W x 0.4"H ea.

• Tray size: 4.8"L x 3.6"W x 0.5"H • Weight: 0.08 lbs.

Part No.	Description 1	10	100
11826	Open bug tray\$2.95	\$2.49	\$1.95
11800	Horizontal bug tray2.95	2.49	1.75

11800

Ⅲ III Bug Cage

· Hold bug boxes or trays

· Modular and interlocking

· Color: blue · Weight: 0.7 lbs.

 Cage size: 5.0"L x 3.9"W x 5.1"H
 Bug boxes not included Part No. Description 10 11332 Bug cage\$6.95 \$5.95 \$4.95

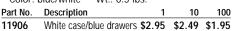
JAMECO Stackable Drawers

· Case size:

4.5"L x 4.4"W x 2.3"H · Drawer size:

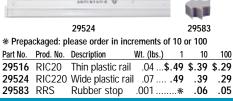
4.4"L x 4.0"W x 0.9"H

· Color: blue/white · Wt.: 0.5 lbs.



Plastic IC Storage Tubes and Rubber Rail Stops

29516: Thin tube (rail) fits 8, 14, 16, 18, 20 and 22-pin integrated circuits. Length: 23.75" 29524: Wide tube (rail) fits 24, 28, 32, 40 and 48-pin integrated circuits. Length: 20" 29583: Rubber stops used to plug plastic rail ends

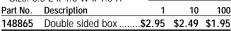


JAMECO Plastic Fliptop Box

Double Sided Box

· Unique double-sided design allows box to be opened from both top and bottom - like having two boxes in one! Color: green • Wt.: 0.3 lbs.

Size: 6.5"L x 4.0"W x 1.5"H



Wall Transformer Enclosures

· Enclosures include 3-prong power plug and cable strain relief

· Material: noryl

· Color: black · Wt.: 0.2 lbs.

 Size: P/N 115051 – 3.35"H x 2.68"W x 2.22"D

P/N 115043 - 3.34"H x 2.70"W x 2.26"D Part No. Style 10 Non-vented......\$2.15 \$1.95 \$1.69 115051 115043 Vented2.15 1.95

115051

IAMECO ABS Table Top Enclosure

Vented for air circulation

Two piece, screw together housing makes it perfect for enclosing your project. Two slide on strain reliefs can be used for AC/DC power entry and sensor/control cable. Vents allow air circulation with four feet to promote bottom to top air movement.

· Includes 2-piece ABS plastic enclosure, (2) cable strain reliefs, (4) housing screws, (3) internal mounting holes (0.07" dia.) for project board and transformer well (2.60"L x 1.25"W)

Size: 5.0"L x 3.5"W x 2.7"H • Weight: 0.4 lbs. Part No. Description 10 100 Table top enclosure ...\$4.95 \$4.49 151159

Digital Panel Meter Enclosure

Includes connecting strips and screws

Compatible w/ DPM188 digital panel meters (pg 37) Case size: 6.0"W x 2.8"D x 2.8"H

Display window size: 1.9"W x 0.8"H

Aluminum • Weight: 0.4 lbs.

Part No. Description 10 138974 DPM enclosure \$8.95 \$7.95

JAMECO Plastic Jar

· Ideal for storing small items such as nuts, bolts, screws, ICs, sockets, etc.

· Clear plastic jar with white top lid

Size: 2.3"Dia. x 2.4"H

· Weight: 0.1 lbs.

Part No. Description 10 100 1000 179952 Plastic jar.....\$.49 \$.45 \$.39 \$.29

3IVI Adhesive Rubber Feet

providing a non-slip, non-scratch surface.

142666 SJ5023BLKC Black tapered square

These are perfect for project boxes,

Brass Part No.

JAMECO Component Cabinet





81701

Drawer (85454) Divider (85446)

 Includes: 20 clear plastic drawers, 20 dividers and 30 adhesive I.D. labels

- Drawer can be divided into 4 sections (clear)
- · Wall mountable cabinet (ABS black)
- Cabinet size: 6.0"D x 15"W x 7.9"H Wt.: 4.7 lbs.
- Drawer size: 5.5"L x 2.7"W x 1.5"H
- Divider size: 2.4"L x 1.1"H Divider weight: 0.01 lbs.
- * Prepackaged: please order in increments of 10 or 100

Part No.	Description 1	10	50
81701	Component cabinet\$15.49	\$13.95	\$12.49
85454	Drawer for cabinet69	.59	.49
85446	Divider for drawer*	.19	.15

Hardware, Spacer and Standoff Kit

Includes 2400 pcs. (24 types) Spacers, Standoffs, Nuts. Flat, Tooth & Lock Washers and Slotted PH Screws. 108433:



· Includes a 20 drawer

component cabinet (81701, above), 20 clear plastic drawers (85454, above), 20 clear dividers (85446, above), 30 adhesive labels for drawers to identify parts in kit and all the components listed below

· Weight: 7.5 lbs.

130497:

• Include	es parts listed below	 vveignt: 2.7 	IDS.
Part No.	Description	1	10
108433	2400 pc. Hardware kit	\$59.95	\$53.95
130497	Refill for 108433 (240	0 pc.) 44.95	39.95

For additional component kits and grab bags see pages 22 & 23

Hardware Assortment

- 2-56 4-40
- 6-32 • 8-32
- Screws Nuts
- · Washers
- Lock Washers
 - Plastic Steel Aluminum
- 1 lb. (500 pieces) assorted types screws, nuts

Fig. 3

.81 x .30

washers, and lock washers Product No.

GB149\$4.95 \$4.49 \$3.95 171571

Fig. 4

126981

14.95

12.95

119618

11.49

Part No.	Product No.	Туре	Fig.	Pack	Dimensions (W" x H")	1	10	50
119618	SJ5012BLK4	Black cylindrical	1	4	.50 x .14	\$1.25	\$.99	\$.75
142658	SJ5012BLKC	Black cylindrical	1	100	.50 x .14	5.95	5.35	4.79
142771	SJ5008BLKC	Black tapered square	2	100	.50 x .12	5.95	5.35	4.79
142682	SJ5018BLKC	Black tapered square	3	100	.50 x .23	8.95	7.95	6.95
126981	S 15023BLK4	Black tanered square	1	4	81 x 30	1 95	1 75	1 59

Fig. 1



Fig. 2

JAMECO Proto PC Boards, Enclosures and Accessories 111

JAMECO Prototype Builder Boards, Enclosures and Hardware *All boards sold individually.

The Jameco Prototype builder boards are specifically designed to fit into our ABS speedy boxes, die cast aluminum enclosures, aluminum boxes, metal cabinets and heavy duty instrument cases. These pre-cut boards have 2 or 4 mounting holes compatible with PC board mounting hardware listed bottom right. (P/N 106551)

Board description: laminated glass epoxy 1/16" thick fire retardant per FR-4 specs. Copper clad and solder mask one side. Drilled holes: .035" diameter on .080" square pad. Pads spaced on .10" x .10" grid (used with all boards)

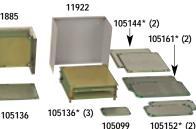


106551

Hardware Set (20)







See page 73 for hardware and pages 49 for knobs

See page 112 for more details

Call for large OEM pricing.

JAMECO ABS Speedy Enclosures

Will not crack or split when drilled or punched. PCB mounting slots on all four sides and the lid has a lip for precision fit (adds 0.4" height). Complete with four screws and lid. All sizes below are for interior dimensions. • Color: black • ABS plastic



Part No.	Product No.	Size (L x W x D)	Weight (lbs.)	1	10	50	100
18921	H2855★	3.1" x 2.0" x 0.9"	0.1	.\$2.39	\$2.15	\$1.95	\$1.49
18913	H2853	4.9" x 2.5" x 1.5"	0.2	2.49	2.25	1.95	1.75
18892	H2851	6.0" x 3.5" x 1.9"	0.4	3.15	2.75	2.49	2.25
18905	H2852★	7.5" x 4.3" x 2.3"	0.5	4.29	3.69	3.29	2.69

Printed Circuit Boards for ABS Speedy Enclosures

Power/ground, perimeter bus with pad per hole (except P/N 105099)



	(oncopi.	,,,,		
•	Plated or	ne side holes	 Weight: 0.1 lbs 	

Part No.	Product No.	Size (L x W)	No. of Holes	1	10	50	100
105099	2855PCB★	2.7" x 1.6"	288	\$5.49	\$4.95	\$4.49	\$3.95
105128	2853PCB	4.4" x 2.0"	669	7.95	6.95	6.25	5.59
105152	2851PCB	5.5" x 3.1"	1450	9.95	8.95	7.95	6.95
105161	2852PCB★	7.0" x 3.6"	2225	13.95	12.49	11.25	9.95

JAMECO Die Cast Aluminum Enclosures

High quality die cast aluminum cases come with channeled walls for easy PCB mounting. Ideal for RF circuits because the lid forms an effective screen against RFI interference. Made from aluminum, an excellent heat-sink, these cases are great for high temp circuits (up to 600°C). Complete with screws.



105136

_	_	-			11//		
Part No.	Product No.	Size (L x W x D)	Weight (lbs.)	1	10	50	100
11957	B5002	3.9" x 2.0" x 1.0"	0.2	.\$4.49	\$3.95	\$3.49	\$3.19
11965	B5004	4.7" x 2.4" x 1.6"	0.4	7.49	6.49	5.59	4.95
11973	B5006	7.5" x 4.3" x 2.4"	1.2	10.49	9.49	8.49	7.49

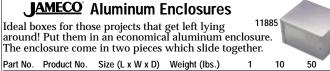
Printed Circuit Boards for Die Cast Aluminum Enclosures

•	Power/	ground	, perimete	er bus	with	pad	per	hole	

٠	Plated	one side	holes	Weight: 0.1 lbs.
---	--------	----------	-------	------------------------------------

 Plated 	one side hole	s • Weight: 0.	1 lbs.	105	5101		
Part No.	Product No.	Size (L x W)	No. of Holes	1	10	50	100
105101	5002PCB	3.5" x 1.5"	365	.\$6.95	\$6.25	\$5.59	\$4.95
105128	5004PCB	4.4" x 2.0"	669	7.95	6.95	6.25	5.59
105161	5006PCB★	7.0" x 3.6"	2225	.13.95	12.49	11.25	9.95

Ideal boxes for those projects that get left lying around! Put them in an economical aluminum enclosure.



Part No.	Product No.	Size (L x W x D) \	Neight (lbs.)	1	10	50	100
11869	B2300	4.0" x 2.0" x 2.8"	0.2\$3	3.95	\$3.49	\$2.95	\$2.49
11885	B2320	5.0" x 4.0" x 3.0"	0.45	5.95	4.95	4.49	3.95
11893	B2335	7.0" x 6.2" x 4.6"	0.8	7.95	6.95	6.25	5.59

Printed Circuit Boards for **Aluminum Boxes and Rubber Feet**



• Plated	one side hole	s • Weight: 0	.1 lbs.				-
Part No.	Product No.	Size (L x W)	No. of Holes	1	10	50	100
105110	2300PCB	3.4" x 2.4"	637	\$6.95	\$6.25	\$5.59	\$4.95
105136	2320PCB	4.5" x 3.3"	1266	8.95	7.95	6.95	5.95
105179	2335PCB★	6.5" x 5.0"	2829	13.95	12.49	11.25	9.95
119618	Adhesive blk	rubber feet .49	3"Dia. x .14"H (4)	1.25	.99	.75	.65

IAMECO ABS Enclosures w/ Clear Tops

Case is made of a gray ABS plastic body with a clear polycarbonate top cover. Includes screws for mounting boards or electronic components, rubber gasket



for a tight seal on your equipment and drilled holes for mounting Size (L x W x D) Weight (lbs.) Part No. Product No. 141831 203C1 4.6" x 3.2" x 1.8" 0.3**\$7.95** \$6.95 \$6.25 \$5.59 141840 203D1 $0.4\,.....\mathbf{8.95}$ 7.95 6.95 6.3" x 3.2" x 1.8" 5.95 141858 203F1 7.0" x 5.5" x 2.5" $0.8 \dots \dots \boldsymbol{9.95}$ 8.95 7.95 6.95

IAMECO Metal Enclosures

High quality metal enclosures are made to suit a large variety of electronics projects and applications. The base is made of aluminum. Slots are located on the sides of the cases for maximum cooling. Cases screw together and come with an attractive two-tone finish.

Mounting screws and rubber feet included



Part No. Product No. Size (L x W x D) Weight (lbs.) 0.4**\$5.25 \$4.49** 11914 \$4.25 \$3.75 R2741 4.0" x 3.3" x 2.2" 0.8**6.95** 11922 B2743 5.9" x 5.3" x 3.0" 6.25 4.95 11949 B2744 7.3" x 6.3" x 2.8" 1.17.95 6.95 5.59

Printed Circuit Boards for Metal Cabinets

Power/ground, perimeter bus with pad per hole • Plated one side holes Part No. Product No. Size (L x W) No. of Holes \$4.95 105110 2741PCB 3.4" x 2.4" 637.....**\$6.95 \$6.25** \$5.59 2743PCB 4.7" x 4.5" 1869.....**9.95** 8.95 7.95 6.95 6.5" x 5.0" 105179 2744PCB* 2829.....**13.95 12.49 11.25** 9.95

JAMECO Heavy Duty Instrument Cases

Both cases split apart for ease of working. Four plastic feet molded on unit. P/N 18876 includes ventilation and speaker sound slots.



Part No. Product No. Size (L x W x D) Wt. (lbs.) Color gray \$6.49 \$5.95 \$5.49 \$4.49 18868 H2505 7.9" x 6.3" x 2.5" 0.8 18876 H2507* 10.0" x 7.5" x 3.1" 1.4 gray ... **8.49 7.49 6.49** 5.49

Printed Circuit Boards for Heavy Duty Instrument Cases

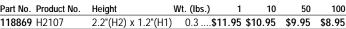
Power/ground, perimeter bus with pad per hole • Plated one side holes

Part No.	Product No.	Size (L x W)	Wt. (lbs.)	Holes	1	10	50	100
105179	2505PCB★	6.5" x 5.0"	0.1	2829 .	.\$13.95	12.49	11.25	\$9.95
105187	2507PCB★	8.8" x 6.1"	0.2	4771 .	24.95	22.49	19.95	17.95

JAMECO Instrument Case with 9-volt Battery Compartment

Molded black plastic with two metal face plates

Separate 9 volt battery compartment • Size: 5.7"L x 3.4"W



PC Board Mounting Hardware for Above Enclosures and Cases (4 Sets)

(4) spacers, (8) screws and (8) washers • Weight: 0.2 lbs. Part No. Description 10





8

100

112 Proto PC Boards and Accessories

JAMECO & **LECTRONIC COMMAN**General Purpose Prototyping Boards

Select the prototype board that fits your needs from our comprehensive product listing. Prototyping boards with punched holes are convenient, economical tools for assembling circuit components and cost effective alternatives to custom designs.



105110







21477

• .062" board thickness • 0.1" hole spacing

- 0.04" hole diameter 0.08" pad size
- PCB material: epoxy glass; except P/N 43140 and 37612 phenolic
- · Plated through pads are double-sided
- All .042" Dia. hole boards use terminals T44, T49, and T421 (see below)
- See pg 111 for PCB mounting hardware



Board Outline









Α	В	С	D
Holes Only	Pad Per Hole	Power/Ground Perimeter	3 Hole Solder Pa
		Bus with Pad Per Hole	and Bus

Circuit Patterns

• See b	g III loi PCI	5 mounting	Hai uwai e							Dus Wi	uiraurei	iioic	and bu	
Part	Product	Size (inches)	Fits Case(s)	Circuit	Hole	# Holes	Power/Ground	Connector	# Mounting			Pric	cing	
Number	Number	(W" x L")	(see page 111)	Pattern	Pads	x Dia.	Busses	I/O or Edge	Holes x Dia.	Weight (lbs.)	1	10	50	100
105099	2855PCB★	1.60 x 2.70	18921	В	single-sided	288 x .035"	none	none	2 x .115"	.02	\$4.95	\$4.49	\$3.95	\$3.49
105101	5002PCB	1.50 x 3.50	11957	С	single-sided	365 x .038"	4	none	2 x .140"	.02	6.95	6.25	5.59	4.95
105128	2853PCB	2.00 x 4.40	18913, 11965	С	single-sided	669 x .038"	4	none	4 x .140"	.03	7.95	6.95	6.25	5.59
105110	2300PCB	2.40 x 3.40	11869, 11914	С	single-sided	637 x .038"	4	none	2 x .140"	.03	6.95	6.25	5.59	4.95
28177	PCB1	2.42 x 4.10	18913	С	plated through	674 x .040"	none	none	4 x .120"	.04	4.95	4.49	3.95	3.49
105152	2851PCB	3.10 x 5.50	18892	С	single-sided	1450 x .035"	7	none	4 x .140"	.07	9.95	8.95	7.95	6.95
105136	2320PCB	3.30 x 4.50	11885	С	single-sided	1266 x .035"	4	none	4 x .140"	.06	8.95	7.95	6.95	5.95
105161	2852PCB★	3.60 x 7.00	18905, 11973	В	single-sided	2225 x .035"	4	none	4 x .140"	.10	13.95	12.49	11.25	9.95
105144	2743PCB	4.50 x 4.70	11922	С	single-sided	1869 x .035"	6	none	4 x .120"	.09	9.95	8.95	7.95	6.95
21434	JE401(8001)★	4.50 x 6.50	18868	B/D	single-sided	2360 x .042"	2	none	none	.12	19.95	17.95	15.95	13.95
21451	JE405(8003)★	4.50 x 6.50	18868	С	single-sided	2360 x .042"	1	none	none	.12	19.95	17.95	15.95	13.95
43140	64P44XXXP	4.50 x 6.50	18868	Α	drilled only	2860 x .042"	none	none	none	.09	5.95	5.35	4.75	4.49
52943	84P44WE	4.50 x 8.50	18876	А	drilled only	3740 x .042"	none	none	none	.15	8.95	8.49	7.95	6.49
37604	169P44WE	4.50 x 17.0	N/A	Α	drilled only	7524 x .042"	none	none	none	.31	15.49	14.95	14.49	13.95
37612	169P44XXXP	4.50 x 17.0	N/A	Α	drilled only	7524 x .042"	none	none	none	.25	11.95	10.95	9.95	8.95
105179	2505PCB★	5.00 x 6.50	11893, 18868, 11949	С	single-sided	2829 x .035"	7	none	8 x .120"	.13	13.95	12.49	11.25	9.95
28193	PCB3	5.00 x 8.00	18876	С	plated through	3705 x .042"	4	mounting area-I/O	4 x .120"	.17	23.95	20.95	19.95	17.95
21477	JE407(8006)★	5.00 x 13.25	N/A	В	plated through	6063 x .038"	none	none	8 x .120"	.28	39.95	35.95	32.49	28.95
105187	2507PCB★	6.10 x 8.80	18876	С	single-sided	4771 x .035"	7	none	8 x .140"	.21	24.95	22.49	19.95	17.95
37621	169P84WE	8.50 x 17.0	N/A	А	drilled only	14448 x .042"	none	none	none	.53	22.95	20.49	18.49	16.95

JAMECO & VESTUE Printed Circuit Prototyping Boards

Printed circuit prototyping boards for virtually any application - including those requiring high component densities and solder or wire wrap connections. All boards are manufactured to precision standards and specifications. All bus and circuit patterns are solder-coated for user convenience.



21531



28206

Edge contacts: gold

· Weight: 0.6 lbs.

Part	Product		Size (Inches)	Ter	minal ty	ypes	1/0	Circuit	Holes	# Holes	Power/	# Mounting	Weight		Pricing	
Numb	er Number	Description	WxL	T44	T49	T421	Connector	Pattern	Pads	x Dia.	Ground Bus	Holes x Dia.	(lbs.)	1	10	25
21531	JE417	PC/XT 8-bit	4.2 x 6.5	yes	yes	yes	D-sub 9 to 37-pin	С	plated through	2126 x .042"	2	8 x .120"	.12	\$24.95	\$22.49	\$19.95
28206	PCB4	PC/XT/AT 16-bit	4.25 x 13.13	yes	yes	yes	D-sub 9 to 25-pin	С	plated through	4890 x .042"	2	4 x .120"	.23	24.95	22.49	19.95

· See page 111 for circuit board mounting hardware · See page 73 for aluminum round and hex spacers & standoffs

Wire Wrap and Push-In Terminals (for .042" Diameter Holes)

Specifications: • Material: copper alloy • Prebagged 100 pcs

34147 Push-In Micro-Klip Terminals

• Overall length: .36" • Post size: .032" x .045" 34155 Miniwrap Wiring Terminals: • Shoulder: .045"

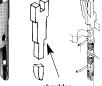
· Two prong with square tail for wire wrapping

Overall length: .69" • Post size: .025"Sq.

34163 Klipwrap Wiring Terminals: • Shoulder: .045"

· Three prong with square tail for wire wrapping

• Overall length: .83" • Post size: .025"Sq.



Part	Product	Height Above	Length Below	Weight	100 pc.	units
Number	Number	.062" Board	.062" Board	(lbs.)	1	10
34147	T421	.200	.097	.01	\$4.95	\$4.49
34155	T44	.065	.530	.02	5.95	5.35
34163	T49	.200	.530	.01	12.95	11.49

JAMECO Copper Plated **Blank Circuit Boards**

Ideal for hobbyists and students doing prototypes of circuits. Copper plating on board for either single sided or double sided boards.

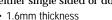




Fig. 1 / Fig. 2 / Fig. 3

	Single Side									
Part No.	Part No. Product No. Size (L x W) Fig. Wt. (lbs.) 1 10 50									
169279	PCBS3X6	3.0" x 6.0"	3	0.1	\$2.95	\$2.49	\$1.95			
169287	PCBS6X6	6.0" x 6.0"	2	0.2	4.95	4.49	3.95			
169295	PCBS12X12	12.0" x 12.0"	1	0.5	12.95	11.49	9.95			
		Do	ouble S	Side						
169308	PCBD3X6	3.0" x 6.0"	3	0.1	3.95	3.49	2.95			
169316	PCBD6X6	6.0" x 6.0"	2	0.2	6.95	6.25	5.59			
169324 PCBD12X12 12.0" x 12.0" 1 0.7 17.95 15.95 14.49							14.49			



Electronic Modules and PCB Development Materials 113

Datak Products Photo Etch™ Printed Circuit Kit

Generate your own 1:1 artwork, then use the patented Fast Neg. film process to make a photo negative, sensitize and expose a blank copper board, then develop and etch it.



No darkroom or camera is required.

Weight: 4.6 lbs. • Light source not included

*Shipped via UPS ground to continental U.S. only. Part No. Product No. Description

16731 12-750* Printed circuit (complete) \$39.95 \$36.95

ER1 Direct Etch "Starter" Set

Includes 4 blank circuit boards, dry concentrated ferric chloride etchant, instructions, 8 sheets of direct etch donuts,



DIPS, patterns lines, 1/32" & 1/16" etch resist tape. Part No. Product No. Description Wt. (lbs.) Starter kit 0.7......\$10.95 \$9.95 **70412** ER1

ER11 Copper Clad Circuit Boards

One 5" x 6" and one 3" x 4.5" (copper clad one sided) 1/16" phenolic circuit board. • Weight: 0.2 lbs.

Part No. Product No. Description **16707** ER11 Circ. boards...\$4.95 \$4.49 \$3.95

ER3 Dry Concentrated Etchant

· Makes one pint of etch solution · Weight: 0.3 lbs. Part No. Product No. Description 10 **70201** ER3 Dry etchant \$3.95 \$3.49

Pre-Sensitized Circuit Boards and Developer

· Pre-coated circuit board

· Includes instructions

· Weight: 0.08 lbs.









10	/00	10/23		/02	וט
Part	Product				
Number	Number	Description W	/t. (lbs.)	1	10
16758	ER8*	Negative acting re	esist		
		developer, 16 oz.	1.2 \$6	.95	\$5.95
16723	ER18	TINNIT™, 1 pint	0.2 6	.95	5.95
70261	ER71*	Negative-acting presist liquid, 4 oz		.95	7.95
70480	ER181	TINNIT [™] , 1/2 gall size (bulk pack)	on		
	*Shipped	via UPS ground to cont			

JAMECO

Order Toll-Free

Used for application of reactive solvents

• Metal handle • Length: 6" • Weight: 0.01 lbs. Part No. Description 10 100 1000 136637

153322 Acid brush\$.49 \$.39 \$.29 \$.15 136629 #9903 template "B"5.95

3-year manufacturer's warranty

3 Second - 1 Minute Cyclic Timer

By feeding the timer, the relay will be connected immediately during the adjusted running time. Once this time has finished, the relay will



remain in stand still until the stop time is completed; restarting, repeating the start and stop process until power supply is disconnected.

Output by relay
 Contact rating: 5A @ 200VAC

Requires power supply: 12V @ 50mA (recommend P/N 100095, pg 89)

Size: 3.0"L x 1.7"W x 1.2"H • Weight: 0.2 lbs. 10

Part No. Description 147846 I-10 timer\$22.95 \$19.95 \$17.95

1 Second - 3 Minute Timer

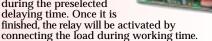
By operating a button, the relay will be activated during the adjusted time.

- Output with relay
- Contact rating: 5A @ 200VAC
- Requires power supply: 12V @ 50mA (recommend P/N 100095, pg 89)
- Size: 3.0"L x 1.7"W x 1.2"H Weight: 0.2 lbs. Part No. Description

147871 I-1 timer\$19.95 \$17.95 \$15.95

1 Second - 3 Minute Delaying Timer

Timer will connect the relay after a preselected waiting time. By retriggering, the relay will remain inactive during the preselected



Output with relay • Contact rating: 5A @ 200VAC Requires power supply: 12V @ 50mA

(recommend P/N 100095, pg 89)

Size: 1.7"L x 3.0"W x 1.2"H • Weight: 0.2 lbs. Description

147854 I-33 timer\$22.95 \$19.95 \$17.95

PRECISION NAVIGATION, INC. Compass Modules **Vector 2X Compass Module**

- · 2° accuracy, 1° resolution
- 5Hz sampling rate
- · Pin selectable BCD or binary output format
- 3-wire serial output format (compatible with Motorola SPI and National Microwire)
- Power supply: single 5 volt Hard iron calibration
- Raw uncalibrated magnetometer output optional Master or slave capability for data clock generation
- · Polled or continuous mode options
- Size: 1.5"L x 1.3"W x 0.4"H · Weight: 0.2 lbs. Part No. Description 10 126703 Vector 2X module \$49.95 \$44.95 \$39.95

Electronic Design Templates

 Include symbols, components and center spacing layouts

Weight: 0.1 lbs.

136637: #9901 template "A" 1:1 scale 136629: #9903 template "B"





136629 136637

 2:1 scale Part No. Description #9901 template "A" ...\$5.95 \$5.35 \$4.79

EEBEK Modules

Darkness Detector Circuit

Activates relay when the photocell does not receive any light. Adjust sensitivity through potentiometer.

- · Relay contacts rated for 5A @ 200VAC
- Requires 12V power supply (recommend P/N 114825, pg 90)
- Size: 2.6"L x 1.8"W x 1.2"H · Weight: 0.2 lbs.

Part No.	Description	1	10
147889	I-42 detector	\$19.95	\$17.95

Barrier Photocell Circuit

Circuit produces an infrared beam, which when obstructed automatically connects the load. Used for alarms, object counting, steps detector, etc. Includes emitter and receiver with supports.



- Relay rated: 5A @ 200VAC
- Maximum range 3 meters / output by relay
- Requires power supply: 12V @ 50mA (recommend P/N 100095, pg 89)
- Size: 2.8"L x 2.2"W x 1.2"H Weight: 0.2 lbs.

Part No.	Description	1	10	25
147811	RJ-1 photocell	\$39.95	\$35.95	\$29.95

20 Watt RMS Mono Power Amplifier

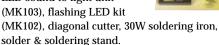
- Input signal: 250mV
- Output impedance: 4-8Ω
- · Maximal current consumption: 2A
- Requires power supply: 12V @ 2A (recommend P/N 143714, pg 91)
- · Terminals: .100" matching disconnect solderless terminals
- Size: 2.8"L x 2.8"W x 1.6"H Weight: 0.23 lbs.

Part No.	Description	1	10
147838	E-11 amplifier	\$24.95	\$22.49

Easy Mini Kit Starter Pack

Two Project Kits Plus Tools

This easy starter pack is perfect for students and hobbyists who will learn electronics and assembly first hand. Includes LED sound to light unit



- · Beginner level
- · Soldering iron UL/CUL listed
- · Includes kit instructions and how to solder instructions with useful soldering hints

Product No. Weight Part No. 169199 K/STARTU 1.4 lbs.\$27.95 \$24.95

Information at Your Fingertips

Log on to our web site for specials, technical tips and expanded product information

www.jameco.com

IAMECO



3-Channel Light Organ 80 piece kit

- Each channel reacts to a different part of the sound spectrum and can be adjusted to react to a different frequency range
- Line or microphone input
 Maximum load 2A per channel
- Space for optional noise filters
- · Each output has individual sensitivity control
- · Complete housing and AC power connectors

Part No. Product No. Dimensions 131684 K5202 6.7"W x 5.6"D x 1.7"H \$54.95 \$49.95

Universal Mono Pre-Amplifier 17 piece kit For audio applications where there is insufficient input signal.

- Requires power supply: 10-30VDC/10mA (P/N 20626, pg 117)
- Max. input signal: 40mV Output impedance: 1kΩ
- Frequency range: 20Hz 20kHz +/-3dB · Adjustable output level Part No. Product No. Dimensions Wt. (lbs) **117612** K1803 1.2"L x 1.8"W \$7.95 0.3..... .\$8.95 \$7.25

FM Oscillator 26 piece kit

Mini FM transmitter (100-108MHz) ideal for family broadcasts, baby monitors and security. May be received by any portable FM radio or tuner.

- Integrated pre-amplifier (sensitivity 5mV)
- Requires power supply: 9-12VDC (P/N 20626 or equivalent, pg 117)

Part No.	Product No.	Dimensions	Wt. (lbs)	1	10	25
117604	K1771	1.8"L x 2.8"W	0.3	\$9.95	\$8.95	\$7.95

1 Amp Power Supply 12 piece kit

Provides a regulated voltage adjustable between 1.2 and 35 volts at 1 amp. LM317 regulator gives you remarkably better ripple and regulation characteristics than conventional regulators. Chip includes current limiter and thermal overload protection.

- Output current max.: 1.5A Max. dissipation: 15W (cooled)
- Max. input voltage: 40V
 Requires quick connect power transformer: 25.2VCT @ 2A (P/N 102103 or equivalent, pg 85)

	Product No.	Dimensions	1 0 , 7	1	10	25
117621	K1823	2.1"L x 2.1"W	0.3	\$12.95	\$11.49	\$9.95

Sound Generator Kit 61 piece kit

- · Produces 10 different sounds with adjustable speed: guns, sirens, car engines, explosions, tunes, screeching tires, phaser guns
- Requires 9V battery (recommend P/N 151095, pg 82)
- · Requires 8 ohm/1 watt speaker (P/N 102031 or equivalent, Push-button keyboard $na \dot{4}3 = not included)$

Part No. Product No. Dimensions Wt. (lbs) 1 10 127562 K4401 2.8"L x 2.8"W 0.4	P9 .0	mot moradou,		battori ito j boar a		
127562 K4401 2.8"L x 2.8"W 0.4 \$29.95 \$25.95	Part No.	Product No.	Dimensions	Wt. (lbs)	1	10
	127562	K4401	2.8"L x 2.8"W	0.4	\$29.95	\$25.95

Supermini 2.5W Audio Power Amplifier 27 piece kit

This circuit has incredibly tiny dimensions. The IC has a pre- and power amplifier, which can be used separately by cutting a jumper.

- Requires 4.5-15VDC @ 400mA power supply (recommend P/N 114825 pg 90) Operating frequency: 60Hz to 15kHz Max. output power: 2.5W (4Ω , 12V)
- · Short circuit/thermal overload protection

Part No.	Product No.	Dimensions	Wt. (lbs) 1	10	25
127175	K2637	1.7"L x 1.3"W x 1.1"H	0.3 \$9.9 5	\$8.95	\$7.95

7W Mono Amplifier Kit 22 piece kit

- Music output power: $7W/4\Omega$ RMS output: $3.5W/4\Omega$ & $2W/8\Omega$
- Harmonic distortion: 0.05% (1W/1kHz)
- Frequency response: 20 to 20kHz (-3dB)
- Short circuit/overload protection
 Requires speakers
 Requires 15VDC (8-18VDC) @ 500mA power supply
- (recommended P/N 155803, pg 90)

Part No.	Product No.	Dimensions	Wt. (lbs)	1	10	25
127255	K4001	2.2"L x 1.4"W	0.3	\$12.95	\$11.49	\$9.95

Electronic Record / Playback Module A 114 piece kit

- · Digitally record and play up to 5 voice messages
- 12 to 20 seconds per module (can cascade modules)
- Requires loudspeaker output: 8Ω (recm'd P/N 102031, pg 43)
- · Requires 9-12VAC transformer or (4) AA batteries (recommend P/N 100061, pg 88 or 151087, pg 82)

Part No.	Product No.	Dimensions	Wt. (lbs)	1	10	ı
127571	K4400	4.8"L x 3.8"W	0.5	\$49.95	\$44.95	L



This amplifier may make the difference in your reception quality in areas with any deflection due to terrain and buildings.

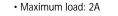
- Supply voltage: 12-15VDC @ 1-3mA
- Gain 22dB (10MHz to 150MHz)
- · Includes metal casing to store amp

Part No.	Product No.	Size	Wt. (lbs)	1	10
129146	K2622	3.4"L x 1.4"W x 1.0"H	0.4	\$14.95	\$13.49

Slow On/Slow Off Dimmer A 81 piece kit

Excellent device to control lighting.

- · 2 mode operation: dim slowly (2 sec. to 1 hour) and timer/dimmer (independent adjustment 1 sec. to 30 min.)
- · Voltage inputs: 110-125 or 220-240V, 50 or 60Hz for external power use (2) P/N 112723 (pg 43)



Part No. Product No. Dimensions Wt. (lbs) 127589 K2657 3.7"L x 2.7"W 0.4. .\$22.95 \$19.95

Dual 30 Watt Power Amplifier 38 piece kit

- Dual 30W/4 Ω Channel separation: 70dB
- RMS output: dual 15W @ 4Ω or dual 10W @ 8Ω
- · Frequency bandwidth: 7Hz to 60kHz (-3dB)
- Supply voltage: 24VCT @ 2A (50W transformers), recommend (P/N 101864, pg 85)



Pink Noise Generator 34 piece kit

Analyze the acoustic properties of a room.

- 33-bit shift register Pink noise filter: -3dB per octave
- Clock frequency from 30kHz and 100kHz
- · Output voltage: 150mV RMS @ 40kHz
- Requires 9-12VAC or 12-15VDC @ 5mA transformer (recommend P/N 100061, pg 88 or 129314, pg 90) Can be used with P/N 129171 (below)

Part No.	Product No.	Dimensions	Wt. (lbs)	1	10
131705	K4301	2.8"L x 1.6"W	0.4	\$14.95	\$13.49

Audio Spectrum Analyzer 381 piece kit

Visualize the composition of audio signals.

- Ten frequency bands 32 to 16kHz
- Requires 2 x 9VAC, 18VCT transformer (P/N 105531, pg 85) or 12-15VDC @ 1A (P/N 161533, pg 90)
- Use P/N 131705 (above) to adjust the equalizer to the acoustic behavior of room Part No. Product No Dimensions Wt. (lbs) 5.8"L x 3.2"W 129171 K4300 \$99.95 \$89.95

Universal Start and Stop Timer 18 piece kit

- Timer for applications requiring a delay up to 60 minutes
- Power requirements: 12VDC @ 55mA (recommend P/N 100095, pg 89)
- Time interval adjustable 0-15 min. (w/o modifications)

Part No.	Product No.	Dimensions	Wt. (lbs)	1	10	
120610	K2570	1 5"L v 2 7"\//	0.4	\$12.95	¢11 //Q	\$10

DC Controlled Dimmer A 37 piece kit

This circuit is ideal for replacing an existing dimmer switch; can be used in a control application via P/N 128928 interface board (pg 115).

- Supply voltage: 110V or 220-240V, 50 or 60Hz
- Can be used for 24VAC
 DC control voltage: 0-10VDC
- Maximum control current: 2.25mA @ 12V

Part No. Product No. Dimensions Wt. (lbs) 3.0"L x 2.0"W x 1.8"H 0.4.....**\$21.95** 128901 K8003

Universal Battery Charger/Discharger 85 piece kit

- Charges current from 15mA to 750mA selectable
- · Charges both Ni-MH and Ni-Cad batteries
- Usable battery voltage: 1.2/2.8/3.6/4.8/6.0/7.2/8.4/9.6 volts
- · Quick charge in 52 min. · Normal charge in 14 hrs.
- Automatic discharge and charge cycle
- Requires 15VDC / 800mA transformer (P/N 163782, pg 90)

require	53 13 VDC / 000	JIIIA (I di ISTOTTICI (I 71	1 103/02, pg 70)		- 7
Part No.	Product No.	Dimensions	Wt. (lbs)	1	10
147598	K7300	3.13"Sq	0.5	\$21.95	\$19.95









vellemen kii Electronic Kits 115

Computer Interface Board 301 piece kit

Connects to the printer port of a computer without interruption of the printer at the existing port. Works well in control applications such as the DC dimmer (P/N 128901, pg 114) and infrared tran./rec. P/Ns 120555 and 120547 (pg 116).



- 16 I/Os with opto coupler Analog outputs: (8) 6-bit (64 steps), (1) 8-bit (256 steps)
- Analog inputs: (4) 8-bit (256 steps) Full opto-isolation with computer
- 3.5" driver disk w/ routines in C++, QBASIC, Turbo Pascal
- Requires DB25 cable P/N 65787 (pg 181)

Part No.	Product No.	Dimensions	Wt. (IDS)	1	10
128928	K8000	9.3"L x 5.3"W	1.7	\$139.95	\$124.95

10 LED Mono VU Meter Kit 36 piece kit

- Instant visualization of audio signal levels
- · Easy hook up to a LINE level (LOW input) signal source
- · Special input (HIGH input) is provided, which allows direct connection to a speaker output
- Frequency range: 20Hz to 30kHz
- · Dot or bar display mode selectable
- Power supply: 15VDC @ 300mA max. (P/N 153779, pg 90)

Part No.	Product No.	Dimensions	Wt. (IDS)	10
147643	K4304	2.7"L x 1.4"H	0.3 \$17.95	\$15.95

Live Wire Detector 33 piece kit

- · Determine if a wire is live. detect wire within walls and terminating points
- Requires 9V battery (P/N 151095, pg 82)

Part No.	Product No.	Wt. (lbs) 1	10
131692	K7101	0.3 \$11.95	\$10.95

Electronic Ignition System 24 piece kit

- Better starting and smoother running
- Lower fuel consumption
- · Less pollution · Lower servicing costs

Part No.	Product No.	Dimensions	Wt. (lbs)	1	10
120601	K2543	2.8"L x 1.4"W	0.4	\$16.95	\$14.95

Flashing LED Sweetheart 46 piece kit

This kit shows a beating heart.

Great for decorations!

- Operating voltage: 8 to 15VDC (P/N 100095, pg 89)
- · Power consumption: 8mA

Part No.	Product No.	Dimensions	Wt. (lbs)	1	10	25
147555	MK101	2.5"L x 2.4"W x 1.2"H	0.1 \$1	1.95	\$10.95	\$9.95

Flashing LED Kit 23 piece kit

For applications such as model constructions. Adjustable flashing speed by potentiometers.

- · Operating voltage: 9VDC (P/N 151095, pg 82)
- Minimum consumption: 4mA
- 5.5" wire w/ 9V battery connector

Part No.	Product No.	Dimensions	Wt. (lbs)	1	10	25
147580	MK102	1.3"L x 1.4"W x 0.6"H	0.1	\$6.95	\$5.95	\$5.35

Voice Activated Kit 33 piece kit

Uses sound to activate the flashing of 4 bright LEDs.

- Operating voltage: 8-15VDC (P/N 151095, pg 82)
- Minimum consumption: 0.5mA / 12mA max.
- · Adjustable sensitivity

Part No.	Product No.	. Dimensions	Wt. (lbs)	1	10	25
147571	MK103	2.5"L x 1.6"W x 1.4"H	0.1	\$9.95	\$8.95	\$7.49

Electronic Cricket Kit 26 piece kit

Sounds like a cricket when it gets dark!

- Operating voltage: 8-15VDC (P/N 151095, pg 82)
- · Adjustable cricket effect, tone and light sensitivity



Metronome Kit 0 27 piece kit

- Incorporated speaker
- LED beat indication
- · Adjustable volume, beats/min., sound
- Requires 9V battery (P/N 151095, pg 82)
- · On/off switch on board

Part No.	Product No.	Dimensions	Wt. (lbs)	1	10
157331	MK106	2.4"L x 1.6"W	0.1	\$16.95	\$14.95

Water Alarm Kit 7 piece kit

- · Gives an alarm sound when water is detected
- · Incorporated alarm buzzer
- · Water sensor can be placed at a distance by cutting the board and using wires for connection
- Requires 9V battery (P/N 151095, pg 82)

Part No.	Product No.	Dimensions	Wt. (lbs)	1	10
157315	MK108	2.8"L x 1.8"W	0.1	\$9.95	\$8.95

Single Channel Light Organ Kit 16 piece kit

- · Control 120VAC @ 1A
- Modulates a lamp according to the music signal at the input
- · Optical isolated loudspeaker input
- Adjustable sensitivity
- Input sensitivity: 2W to 60W
- Max. load: 120W @ 120VAC; 230W @ 240VAC

Part No.	Product No.	Dimensions	Wt. (lbs)	1	10
169025	MK110	2.4"L x 1.6"W	0.1	\$12.95	\$11.49

Light Computer Kit A 122 piece kit

- 16 programs and 7 outputs turn this kit into a unique light producer forentertainment and display applications
- Supply voltage for lamps: 24VAC to 240VAC
- Circuit supply voltage: 7.5-9VAC/250mA (recommend P/N 100061, pg 88)

Part No.	Product No.	Dimensions	Wt. (lbs)	1	10
127600	K5201	5.4"L x 3.1"W	0.6	\$39.95	\$34.95

Universal Relay Card △ 64 piece kit

An electronic controller that switches higher currents while providing insulation between the controller and the controlled devices.

Shown with 16 relays, only 8 relays included

Relay contact: 5A/220V
 Output voltage: 12VDC/250mA

Power supply: 220V or 125VAC/12VAC

Part No.	Product No.	Dimensions	Wt. (lbs)	1	10
128910	K6714	8.3"L x 5.9"W	1.8	\$59.95	\$53.95
1//126	V/D15M1210	rolay (17C 22F)		2 05	2 /0

Liquid Level Controller A 73 piece kit

Control the level of any container of liquid, also replace the liquid sensors with temperature or light sensors and use accordingly.

- Supply voltage: 12-14VAC @ 300mA min., recommend transformer (P/N 10081, pg 88)
- Alarm signal provided for desired applications

Part No.	Product No.	. Dimensions	Wt. (lbs)	1	10
129154	K2639	4.1"L x 2.4"W x 1.0"H	0.5	\$21.95	\$19.95

Code Lock Kit 67 piece kit

- Switch an alarm on and off or open door locks
- 3000+ codes possible LED indicates state

Part No.	Product No.	Dimensions	Wt. (lbs)	1	10
127554	K6400	1.7"L x 1.8"W	0.5	\$29.95	\$26.95

Electronic Watchdog Kit 104 piece kit

- · Choice of 2 different dogs
- · Realistic simulation through random generator
- · Reacts to environmental noise with adjustable sensitivity
- · Can connect to other trigger detectors

5	Part No.	Product No.	Dimensions	Wt. (lbs)	1	10
5	127597	K2655	5.6"L x 2.9"W	0.5	\$34.95	\$31.49

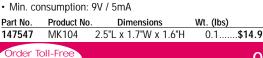


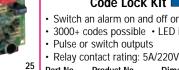






2.49







116 Valleman Kii & JAMECO Electronic Kits KIT ASSEMBLY DIFFICULTY LEVEL: - = Beginner - Intermediate - Expert

34543

134551

120555

Metal Detector 22 piece kit

- · Proximity range adjustable to 8cm
- Reguires 9V battery (recommend P/N 151095, pg 82)
- · LED indicator, can use a buzzer as an option (P/N 105822, pg 42)

Part No.	Product No.	Wt. (lbs)	1	10	25
129091	K7102	0.4	\$10.95	\$9.95	\$8.95

Infrared and RF Code Lock Transmitters and Receivers

- · Use for car alarms, garage doors, door locks, lighting control, etc.
- · Over 8000 selectable codes
- · Use several transmitters with one receiver
- · Transmitters require 12V battery type V23G
- · Receivers feature relay output 10A change-over or pulse contact and require 12-16VDC @ 100mA (recommend P/N 100095, pg 89)

	117647/173235	117655	134543/134551
Transmission	RF	RF	IR
Channels	2-ch	1-ch	1-ch
Range	100'	100'	23'
Asmh difficulty	evnert	evnert	novice

	117647/173235	117655	134543/134551	
ansmission	RF	RF	IR	
annels	2-ch	1-ch	1-ch	
inge	100'	100'	23'	
mb. difficulty	expert	expert	novice	
				•

Part No.	Description	Wt. (lbs)	1	10
117647	K6706 2-ch transmitter (RF)	0.3	\$16.95	\$14.95
173235	K6727 2-ch receiver (RF)	0.5	39.95	35.95
117655	K6706A 1-ch receiver (RF)	0.5	27.95	24.95
134543	K6708 1-ch transmitter (IR)	0.3	13.95	12.49
134551	K6709 1-ch receiver (IR)	0.5	29.95	26.95

15-Channel Infrared Transmitter and Receiver

- · 15 independent channels
- · Transmitter/receiver range: ±30 meters

120555:

· Supply voltage: 9V battery

120547:

- · Each output can be a change-over or pulse contact switch
- · Power requirements: 8-14VDC (recommend P/N 100095, pg 89 or 129314, pg 90)
- PCR dimensions: 2 8"L x 5 7"W

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Part No.	Description	Kit Pieces	Wt. (lbs)	120547 1	10
120555	K6710 transmitter	37	0.8	\$59.95	\$53.95
120547	K6711 receiver	76	0.5	44.95	39.95

Remote Control by Telephone 116 piece kit

- · Possible to turn on or off up to three devices
- · Check conditions of a switch (open or closed)
- Turn lights on and off from a touch tone telephone
- · Check home/office alarm system
- · Turn heat on before arriving home
- · Protected by a user-defined code
- Pick up after 3 or 8 rings (selectable)
- Supply volt.: 12VAC @ 300mA (recommend P/N 101258, pg 88)
- Relay included for one output (10A/250VAC) Case sold separately

Part No.	Product No.	Dimensions	Wt. (lbs)	1	10
120678	K6501	4.1"L x 5.1"W	0.7	\$59.95	\$53.95

Parking Radar 55 piece kit

Parking in tight places can be difficult, but the unit can tell you when you have come within the preset distance you set of the object behind you.

- Detection range: 5cm 1.5m, adjustable angle: 5°
 Power supply: 10-15VDC @ 16mA max or
- auto power plug (P/N 115001, pg 82) Transmitter frequency: 40kHz
- PCB size: base (4.9"L x 1.9"W) sensor (3.8"L x 1.1"W)

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Part No.	Product No.	Wt. (lbs)	1	10	25	
129120	K3502	0.5\$4	4.95	\$39.95	\$34.95	1

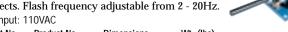
The circuit converts a DC voltage into a series of pulses, such that the pulse duration is directly proportional to the value of the DC voltage.

- PWM range: 0 to 100%
- PWM frequency: 100Hz to 5kHz (adjustable)
- Operating voltage: 8 to 35VDC
- Min. consumption: 35mA
 Max. output current: 6.5A
- Efficiency: better than 90% at full load Adjustable sensitivity: 2.5 to 35VDC

Part No.	Product No.	Dimensions	Wt. (lbs)	1	10	25
120539	K8004	3.3"L x 1.9"W x 1.8"H	0.5	\$19.95	\$17.95	\$15.95

Stroboscope 19 piece kit

Make your own snapshots and "lightning" light effects. Flash frequency adjustable from 2 - 20Hz.



Part No.	Product No.	Dimensions	Wt. (lbs)	1	10
117639	K5300	3.5"L x 2.6"W	0.4	\$17.95	\$15.95

JAMECO Temperature Genie Kit O 19 piece kit

Ever had precious plants freeze on a sun porch when the outside temperature suddenly dropped? With this kit you can build it to sound an alarm when the temperature reaches a critical point or connect to a relay to activate any type of small heater. This gives you 100mA of output.



Part No.	Product No.	Description	Dimensions	1	10
177105	TC-2	Temperature genie	2"L x 1.4"W	\$7.95	\$6.95

JAMECO Infrared Transmitter & Receiver Kit O 26 piece kit

This kit transmits a 40KHz modulated I-R signal to a distance of 6' to 8'. Place the transmitter on one side of a doorway and the receiver on the other and see if an object passes through. Can be used as a remote switch to turn objects OFF and ON by infrared. The IR receiver will only receive 40KHz modulated



infrared light. You can configure the output for normally ON or normally OFF operation. This allows you to use it as a security sensor or as a remote control switch. You can use the receiver to test TV or VCR remote controls.

Power requirement: 6 to 15VDC
 Includes (1) transmitter & (1) receiver

 Transmitter size: 1.0"L x 0.8"W • Receiver size: 1.4"L x 1.2"W

Part No.	Product No.	Description 1	10
177092	IR-2	Transmitter/receiver\$22.95	\$20.95

JAMECO Logic Probe Kit 0 14 piece kit

Digital logic: the heart of today's technological revolution. Yet, digital signals are either "on" or "off", and you need an easy way to monitor them. Enter the EBLOG-300, a simple piece of test equipment that comes in very handy. Logic probes test digital circuits at various points, and show whether that point is high, low or constantly changing. They help you understand and troubleshoot logic gates, timers, clocks, counters, prescalers, and other digital circuits you might come across. The logic probe is powered by the circuit under test.

Part No.	Product No.	Description	Dimensions	1	10
181868	EBLOG-300	Logic probe	4.0"L x .75"W	\$9.95	\$8.95

JAMECO Counter Display Kit - 37 piece kit The EBDC-7 shows how a digital display operates in

digital clocks, frequency counters, tachometers, or general purpose counters. Learn the secrets of 7-segment LED displays. Based on the CD4518 dual BCD up counter (for use in many different counting and frequency-dividing applications) and the Motorola MC14543 BCD-to-7-segment latch/decoder/driver for LCD and LED displays. Possible applications include instrument counters, digital voltmeters, calculator cockpit display, and various clock, cockpit display and various clock, stopwatch, and timer uses, limited only by your imagination.

Power requirement: 5VDC (recommend P/N 177050, pg 117)

Part No.	Product No.	Description	Dimensions	1	10
177041			2.3"L x 2.8"W	\$14.95	\$13.49

AMECO Electronic Kits 117

Timer Debounce Kit 36 piece kit



Based on the LM555 timer chip, a highly stable device for generating accurate time delays or oscillation. When a switch is turned on or off, mechanical bounce noise generates spurious pulses. When operated in monostable mode, the EBTD-9 prevents these noise pulses from adversely affecting your project. Use this circuit to set clocks or counters - any time you need a push-button switch. Or, run the kit in astable mode and learn how clock/timer oscillator circuits work.

• Power requirement: 5VDC (recommend P/N 177050, pg 117)

Part No.	Product No.	Description	Dimensions	1	10
177076	EBTD-9	Timer debounce	2.3"L x 2.8"W	\$12.95	\$11.49

Sweet 16 Tone Decoder Kit 19 piece kit

Sweet 16 Tone Decoder detects dual tone multifrequency (DTMF) data (those sounds you hear when pushing buttons on your phone), and when each individual button is pressed it sends a unique voltage to the electronics on the printed circuit board which



activates a circuit on or off. There are 16 different touch tones, 12 of which are on a normal phone; special key pads have 4 additional buttons (A, B, C, D). This decoder gives an output voltage for all 16 touch tones.

Part No.	Product No.	Description	Dimensions	1	10
181876	TT-16	Tone Decoder	2.8"L x 2.2"W	\$34.95	\$31.95

Touch Switch Kit 28 piece kit

Do away with noisy mechanical switches that wear out. Lightly put pressure on the EBTS-10 touch switch and the (lights, CD player, appliances) come on. Touch the switch again, and it goes off. Based on the LM555 timer running in monostable (timing) mode, as well as the CD4518 dual BCD up counter (used as a



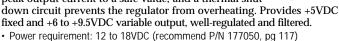
flip-flop), this kit includes a relay driver transistor and a DPDT relay whose contacts are rated at 1.5A. You can switch a 300W appliance with the EBTS-10.

· Power requirement: 5VDC (recommend P/N 177050, pg 117)

Part No.	Product No.	Description	Dimensions 1	10
177084	EBTS-10	Touch switch	2.3"L x 2.8"W \$12.95	\$11.49

Power Supply Kit 0 24 piece kit

Operate your projects with a +12VDC battery. This power supply allows up to 1.0A load current with the heat sinking provided (battery used will determine actual allowable current.) Current limiting is included to limit the peak output current to a safe value, and a thermal shut-



Product No Description Dimonsions

		B 0001.pt.o	Billionono		
177068	EBPS-5	Power supply	2.3"L x 2.8"W	\$12.95	\$11.49

Power Supply Kit 0 24 piece kit

With AC Wall Transformer

The EBPS-4 will supply DC voltage of the proper magnitude and type for P/Ns 177041, 177076, 177084 (pg 117). It supplies tightly regulated and filtered +5VDC, as well as variable output from



+6 to +10VDC. This power supply delivers up to 300mA, and features internal thermal overloadprotection, as well as internal short circuit limit.

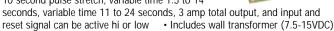
• Includes 12VDC @ 300mA wall transformer with 2.1mm x 5.5mm center positive connector

Part No.	Product No.	Description	Dimensions	1	10
177050	EBPS-4	Power supply	2.3"L x 2.8"W \$17.	95	\$15.95

PIC Relay Controller Kit 22 piece kit

This is a good companion for any kit that needs additional amperage or micro-controlled relay function

· Preset relay functions: on/off toggle mode, on/reset mode, fixed delay .5 second pulse stretch, fixed delay 10 second pulse stretch, variable time 1.5 to 14

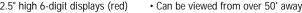


Part No.	Product No.	Description	Dimensions	1	10
181850	PRC-1	Relay controller	2.7"L x 1.8"W	.\$24.95	\$22.49

Digital Clock Kit 183 piece kit

2.5" High 6-Digit Display Fast/slow set switches

- · Time hold control switch
- Safe low input voltage: 9VAC
- · 12 or 24 hour display switch
- Bright 2.5" high 6-digit displays (red)



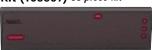
· 105507 kit includes: PC board, components, wall transformer and kit instructions - 183 total pieces (case with red lens sold separately)

Assembled kit shown below (109268)

Part No.	Product No.	Board Size	Wt. (lbs)	1	10
105507	JE725KIT	17.5"L x 3.5"W	1.2	\$69.95	\$62.95

Enclosures for Digital Clock Kit (105507) 38 piece kit





109233 109241

Includes red lens, mounting hardware and · Black satin anodized aluminum easy-to-follow instructions

Size: 18.0"L x 5.3"H x 1.4"D · Weight: 1.7 lbs.

109233 JE725COB Semi-open case	10
107233 3E72300B 3CHII-OPCH Ca3C	2.49
109241 JE725CEAN Enclosed case39.95 3	5.95

Assembled Digital Clock

Assembled

2.5" High 6-Digit Display

- · Fully assembled JE725 digital clock in black satin anodized aluminum case (109241)
- · Hour/minute hold switches
- Includes 9VDC @ 800mA power supply • 8 ft. power cord
- Size: 18.0"L x 5.3"H x 1.4"D · Weight: 3.5 lbs.

Part No. Product No. Description Assembled clock......\$119.95 \$109.95 **109268** JE725AEA

JE2206 Function Generator Kit 21 piece kit

Sine, triangle and square wave

Great for prototyping electronic circuits, whether analog or digital! Produces sinusoidal, triangular (saw-tooth), and square wave-forms at frequencies continuously variable from 1Hz to 100kHz. Requires 12VDC supply or ±6VDC split supply.



 21 piece kit (chip, components, PC board, hardware) • Recommend power supply P/N 20626 (below)

Part No. **Dimensions** Wt. (lbs) 10 20685* 4.1"L x 1.5"W .\$24.95 \$22.95 \$19.95 0.1....

Dual Adjustable Power Supply Kit 48 piece kit

- 48 piece kit (JE215) (components/hardware)
- Adjustable positive and negative supplies ±5 to ±15VDC regulated, 175mA - 750mA per supply
- Positive and negative 5VDC to 15VDC
- Power output (each supply): 5VDC @ 750mA, 12VDC @ 500mA, and 15VDC @ 175mA

120VAC input • PC board construction • LED on indicator

Part No.	Dimensions	Wt. (lbs)	1	10	25
20626*	5.1"L x 3.5"W x 2.0"H	2.1	\$22.95	\$20.49	\$18.49

Ultrasonic Motion Detector Kit 49 piece kit

- 2 boards: one with matched pair of ultrasonic transducers to detect motion from 4-7m away; 2nd board contains crystal controlled oscillator and all circuits
- Switchable latch, red LED indicator
- · Solder pad output to drive external relay or circuits
- Requires 9V battery (P/N 151095, pg 82)
- Size: main board: 2.8"L x 2.0"W x 0.8"H; transducer board: 2.8"L x 0.6"W x 0.9"H

	Description	Wt. (lbs)	1	10
125090	Ultrasonic alarm kit	0.1	\$29.95	\$26.95





JAMECO Electronic Kits 118

Unipolar Stepper Motor Driver Kit 29 piece kit

- · Will drive unipolar stepper motors rated at 6-30VDC @ 1.25A (or less)
- · Drives 5, 6 or 8 lead unipolar stepper motors
- 5VDC regulator stabilizes power to the 555 clock IC

Part No. Description Dimensions Wt. (lbs)

139109\$29.95 \$26.95 Stepper motor 2.6"L x 1.9"W x 1.0"H

1 Watt Amplifier Kit 9 piece kit

- · Circuit designed around a single TDA7052 IC
- · Ideal part for larger projects and battery powered circuits
- Drives 8Ω speaker (not included)
- Operates on 3-15VDC solder pads for all connections
- · Battery and battery snap not included (P/N 151095 and 109153, pg 82)

Part No. Description Dimensions Wt. (lbs) 125111 1 watt amp kit .3"L x 1.1"W x 0.9"H .04......\$6.95 \$5.95 \$5.59

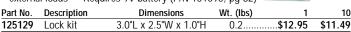
17.5 Watt Bridged Amplifier Kit O 17 piece kit

- Based on the Hitachi HA13118 dual amplifier IC
- · Drives 3-8 ohm speakers (2 required for stereo)
- Requires 12VDC supply (P/N 100095, pg 89)

Description 136207 17.5 watt amplifier kit .\$16.95 \$14.95 0.1.

Combination Lock Kit 26 piece kit

• 2 boards: one with 1-9 touch pads and connected to 2nd board by 3 ft. cable; 2nd board has decoding ICs, matrix to set 4 number code, and relay to control external loads · Requires 9V battery (P/N 151095, pg 82)



D.C. Motor Speed Control 35 piece kit

- · This kit uses Pulse Width Modulation to vary the speed of a DC motor with maintenance of torque
- For motors up to 100VDC/5A max.
- Requires 5-16VDC supply (P/N 114825, pg 90)

Part No.	Description	Dimensions	Wt. (lbs)	1	10
127829	Motor control kit	3.6"L x 2.3"W x 1.2"H	0.2	\$29.95	\$26.95

BG Micro IR Illuminator Kit 0 41 piece kit

- · 36 high powered infrared LEDs
- · Requires 12-15VDC power supply (recommend P/N 114825, pg 90)
- · At 24' the beam is approximately 3.5' across

Part No. Description Dimensions Wt. (lbs) 157964 IR illuminator kit 2"Dia. 0.1....\$14.95 \$13.49 \$11.95

Digital Voice Recorder Kit 51 piece kit

20-sec. single or multiple voice/sound recorder

- · ISD 1420P voice chip
- Easy to use 3 button switches (start, record and play)
- · Flashing LED indicator alerts presence of message
- High quality, natural voice/audio reproduction
 Zero power message storage
- Requires four 1.5V AAA batteries P/N 151087 (4), pg 82 or 9VDC transformer (P/N 100845, pg 89)

Part No. Product No. **Dimensions** 10 116484 JE920KIT 4.6"L x 2.1"W 0.3.....**\$39.95** \$35.95

Speech Recognition Circuit Kit 41 piece kit

- · Includes a PCB, keypad, digital display, microphone and necessary components • External RAM support
- · Single chip voice recognition CMOS LSI
- Speaker dependent Microphone support
- Requires 9V battery (P/N 151095, pg 82)
- · Max. 40 word recognition at .96 seconds word length
- · Min. 20 word recognition at 1.92 seconds word length
- PCB dimensions: 4.8"L x 4.4"W Keypad dimensions: 2.8"L x 2.8"W

Part No. Product No. Description Wt. (lbs) 10 0.6.....**\$99.95 141401** HM2007U1 Speech kit

Triple Voltage Power Supply Kit 103 piece kit

Input voltage: 120VAC @ 50/60Hz

KIT ASSEMBLY

- Power output: Fixed + 5VDC @ 1 amp, adjustable +3 to +12VDC @ 100mA, adjustable -3 to -12VDC @ 100mA
- Fuse protected PC board construction

Part No. 73613 5.1"L x 5.1"W x 2.3"H 2.1**\$26.95** \$23.95 \$21.49

DIFFICULTY LEVEL: = Beginner = Intermediate \triangle = Expert

Siren Kit 0 20 piece kit

- Circuit designed around a dual op amp connected as an oscillator and driver
- Oscillator is off until you press the switch then a
- rising tone is produced until a steady value is reached
- · If switch is released tone starts dropping until it cuts off • Requires 9V battery (P/N 151095, pg 82) • Weight: 0.2 lbs.

Part No. Description Dimensions **125137** 9V siren 2.0"L x 0.8"W x 0.5"H\$5.95 \$5.49 \$4.95 \$4.25

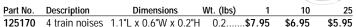
One Chip AM Radio Kit 39 piece kit

- This kit uses a single IC that performs as an RF amp, detector and AGC in an AM radio
- Requires 9V battery (P/N 151095, pg 82)

Part No. Description Dimensions Wt. (lbs) 125161 AM radio kit 4.0"L x 1.3"W x 0.5"H 0.3**\$14.95 \$13.49** \$11.95

Train Sound Kit 0 11 piece kit

- · Produces 4 train sounds
- · Components supplied for operation on 3VDC (includes battery holder for 2 AA), but circuit will operate from 2.4-6VDC (P/N 151087 (2), pg 82 or 155643, pg 89)



DC Voltage Monitor Kit 0 46 piece kit

If battery status is important, you need this kit. It uses 7 LEDs to monitor 12VDC in 1V, 1/2V, or 1/4V steps. Monitor 8V or 5V in 1/4V steps.

Great for hoats motor homes model planes or race car ni-cads

GICGE IC	i bouts, motor	monnes, moder	planes of face car	m caas.	
Part No.	Product No.	Description	Dimensions	1	10
181833	VM-1	Voltage monitor	2 7"L x 1 3"\//	\$7.95	\$6.95

Super Snooper Big Ear Audio Amplifier Mini Kit 17 piece kit

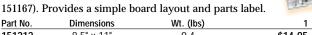
Listen through walls, hear conversations across the room or even listen to sounds a block away. Add a parabolic reflector or mount the microphone in a tube, to isolate unwanted noise and make the microphone a directional one.

- Includes instructions and schematic
- Outputs for speakers or headset
- Operating voltage: 9VDC (P/N 151095, pg 82)

Part No. Dimensions Wt. (lbs) 1.8"L x 1.0"W x 0.6"H .\$10.95 \$9.95 151204 \$8.95 0.1.

Mini Kits Specification Book (56 pages)

Provides schematic diagrams, parts list, assembly instructions, operating and testing, and additional information about the kits (P/N 151204/151239/151183/ 151167). Provides a simple board layout and parts label.



8.5" x 11" .\$14.95 \$13.49 151212 0.4

ELENCO Transistor and Diode Tester Kit

Transistor Mode:

- · Checks all transistors · Measures relative beta of two transistors
- Identifies NPN and PNP, PN or NP junctions.
- Can test transistors in circuit with base or collector resistors as low as 100Ω

Includes carrying case

Diode Mode:

- Indicates cathode or anode leads of diode
- Operates in circuit with resistors 5K and above

Checks all diode types - silicon, power, LEDs, zener

Part No. **Dimensions** Wt. (lbs) \$89.95 119360 6.3"L x 3.8"W x 2.0"H 1.0\$24.95 \$22.49

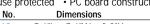












= Beginner = Intermediate = Expert

FM Stereo Transmitter Mini Kit 37 piece kit Run your own FM radio station! Any stereo signal you plug into this unit will be transmitted to any FM radio tuneable from 76-108MHz. Plug in a CD player or tape deck and you have a wireless link to an FM radio within 200 feet. Clarity is approximately 40dB stereo separation. Comes with left and right inputs. • Operating voltage: 9VDC (P/N 151095, pg 82) Dimensions Wt. (lbs) Description

FMST-100 stereo kit 2.7"L x 2.0"W 151239 0.2\$29.95

Digital Thermometer Adapter Mini Kit O 16 piece kit

Turn your digital volt ohm meter into an accurate digital thermometer with 0.1 degree resolution. Measures temperature ranging from -40°F to 250°F. The remote sensor is 0.25" square.

 Requires a 9VDC battery (P/N 151095 pg 82) Part No. Description Dimension Wt. (lbs) 100 **151183** DT-3 kit 2.0"L x 1.4"W 0.1.....\$9.95 \$7.95

TV Notch Filters Mini Kit 🔲 33 piece kit Eliminates unwanted TV channels or interference that alters sound and video. Works on cable channels 2 to 22 and 97 to 99.



Part No.	Description	Description	Wt. (lbs)	1	10
151167	DF-222 TV filter kit	3.2"L x 0.9"W	0.2	\$14.95	\$13.49

Capacitance Adapter Meter Kit 27 piece kit

Measures capacitance range from 2pfd to 2µfd

Works with multimeter w/ 2V range reading and 10MΩ input impedance
 Size (board): 2.0"L x 1.8"W

Requires 9V battery (recommend P/N 151095, pg 82)



Inductance Adapter Meter Kit 22 piece kit

Low inductor range: 3μH to 500μH

High inductor range: 100µH to 5MH

 Works with multimeter w/ 2V range reading and $10M\Omega$ input impedance

· Requires 7.5 to 15VDC power supply (recommend P/N 151095 9V battery, pg 82) or P/N

• Size (board): 2.5"L x 1.7"W 127976 (12VDC @ 300mA, pg 89) Part No. Description 158027 IA-1 inductance adapter .\$14.95 \$13.49

Light Sensitive Relay Kit 20 piece kit Build a stable and advanced circuit that uses light

to control a SPDT 10A relay. Requires 12VDC supply (P/N 100095, pg 89)

Weight: 0.1 lbs.
 Dimensions: 2.4"L x 1.3"W x 1.0"H

Part No. Description 10 25 136223 Light relay kit.....\$9.95 \$7.95

S F N S O R Y Interactive Speech Recognition Kit

Voice Direct 364 is a speaker dependent speech recognition module, allowing training of up to 15 words. This kit maps spoken commands to system control functions. Each time one of the words is recognized, output pins on the module are toggled high for 1 second.



Kit Includes: • Voice Direct 364 module Quick setup guide

Microphone element
 Microswitches (4)
 Speaker (2.25", 8Ω)

Passive component selection to configure the module

Part No. Description 10 173489 Speech recognition kit.....\$59.95 \$53.95

🌀 🌣 🖪 🐧 O R Y VoiceDirect Speech Recognition Kit 🔲

Speaker-dependent speech recognition

Minimal external components

Recognizes up to 15 words or phrases

99% recognition up to 3.2 seconds

· Includes module, speaker, (3) push button switches, (1) microphone cartridge and manual

Size (module): 2.0" square PC board
 Weight: 0.3 lbs.

Part No. Description 162691 Speech recognition kit.....\$49.95

owi Electronic Kits

Hyper Peppy Beginner O/Advanced Kits A

Easy to build and assemble with basic hand tools. This peppy little guy is a fast and zippy robot who will reverse himself and resume a different course

when he comes in contact with an obstacle or detects a loud sound.

Easy to assemble mechanical drive system

140863: Pre-assembled printed circuit board 145496: Soldering required Wt. (lbs) Part No. Description Dimensions

0.9\$23.95 \$21.49 **140863** Beginner kit 12.0"L x 7.0"W x 3.5"H 145496 Advanced kit 12.0"L x 7.0"W x 3.5"H 0.923.95 21.49

Soccer Robot Beginner Kit 🧶

Allows you to build this interactive robot with simple hand tools. Soccer robot has 6 operational kicking mechanisms. It runs forward, backward, turns left or right and executes 360 degree turns.

Hardware for building the kit
 Control box and ball

Part No. Description Dimensions Wt. (lbs) 12.0"L x 7.0"W x 3.5"H \$29.95 **140871** Beginner kit 1.1..... \$33.95

Spider Advanced Kit

A robot that moves about avoiding obstacles by an infrared ray sensing system. The infrared ray sensing system, composed of infrared ray emitter and infrared ray receiver, finds obstacles to go around and changes its direction.

· Infrared sensor including infrared diode/photo diode/IC

2 DC motors • Hardware for building the kit

Description Dimensions Part No. 140821 Spider kit 12.0"L x 7.0"W x 3.5"H 1.2....**\$59.95** \$53.95

Line Tracker Advanced Kit

A robot that follows a black line on white paper with the use of a photo-interrupter which projects and receives infrared rays. While black absorbs infrared rays, white reflects them.

Infrared sensor including infrared diode/photo diode/ transistors/IC • 2 DC motors • Hardware for building the kit

Part No. Description Dimensions Wt. (lbs) **140839** Line tracker kit 12.0"L x 7.0"W x 3.5"H. 1.1... .\$59.95 \$53.95

Triple Action Solar Car Kit 🧶

An exciting way to use alternative power.

- Aerodynamic sports car shell can be painted or left clear to view mechanics • Powerful 1.4 volt/ 350mA solar cell
- Multispeed transmission 4-wheel chasis
- Parts are removable to create other projects
- Two-way power source for solar or battery power (1 AA battery, not included) Part No. Description Wt. (lbs)

0.7\$39.95 \$35.95 147774 Triple action solar car

Programmable Movement Robot Kit A

This robot uses two sensors, wheels and a 4-bit microcomputer to execute movement programs input via its 26-key control panel.

Communication with a computer is also possible with an optional interface card.

2 DC motors and hardware for building kit
 One-year warranty

Requires 3 AA or one 9V battery (P/N 151087 (3) or 151095, pg 82)

Part No. Description Dimensions Wt. (lbs.) 10 1.0.....\$69.95 \$62.95 5"Dia. (at base) x 2.8"H **149702** Robot kit 149711 Interface kit 5"Dia. (at base) x 2.8"H 0.2.... .29.95 25.95

One Touch Selectable Gear Box Kit

· One touch slide switch with 6 gear ratio possibilities: 6.8:1 to 807.93:1

Assembly required • 35 piece kit

• Dimensions: 2.5"L x 1.1"W x 1.5"H

Part No. Description 145509 Gear box kit \$14.95 \$13.49

Log on today!

www.jameco.com











120 Kits and Accelerometers

W Robotic Arm Trainer Kit 109 piece kit

Five Axis of Motion

Teaches the basic robotic sensing and locomotion principles while testing your motor skills as you build and control the arm. This unit can be commanded or instructed through its five switch wired controller with lights to grab, release, lift, lower, rotate wrist, and pivot sideways. Five motors and joints allow flexibility.

- Advanced level
- · Max. length outwards: 14.2"
- Max. height upwards: 20.1"
 - Max. lifting capacity: 4.6 oz.
- Shoulder movement @ 120° Elbow moving range @ 135°
- Wrist rotation clockwise or counter clockwise @ 340°
- Grip opens to 2" wide Weight: 4.5 lbs.
- · Rotates left to right at the base @ 350° Requires 4 D batteries (not included)

Part No.	Description	1 5
157366	Robotic arm kit\$69.9	5 \$62.95
159345	Robotic controller software79.9	5 69.95



MONDO • TRONICS Muscle Wire and Accessories

Muscle Wires®

These unique nickel-titanium sł li O

lloy Muscle Wires® actually		Metal wires that shorten is length when powered
horten in length when	1 6	3 100 10
lectrically powered, and can	1 1 5	Logic 1 meter politaci 20 Clim politaci 1,000 mA
ift thousands of times their	\	Sc. bytemylass: 922 grand gc. bejminateries: 172 grand gc. bytemalet: 3-0%
wn weight. • Weight: 0.04 lbs.	Bar Bas Prochad	
Multiply by 0.0098 to get force in Newton	ıs	
* Cycles per minute, in still air, at 20° Cent	tigrade	
140		+

		Diameter	Resistance	Current	Weig
Part No.	Description	(microns)	(ohm/m)	(mA)	(grai
160063	Flexinol 037LT	37	860	30	4
141882	Flexinol 050LT	50	510	50	8
141321	Flexinol 100LT	100	150	180	28
141874	Flexinol 150LT	150	50	400	62
160055	Flexinol 375LT	375	8	2750	39

How it works... Pressing the switch lets power flow from the batteries through the Muscle Wire*, heating it and causing it to contract and raise the lever and lift the eiaht. When power is removed, the Muscle

Build It

Yourself!

Wire® coo and the w	ols and relaxes, veight helps it its starting	+ Batteri	+ = Batteries AA1 100 μm 10 cm		
Deform Weight* (grams)	Recovery Weight* (grams)	Typical Rate**	Length (meters)	l	
1	20	52	1	Т	

sition.	ns starting	(2 x A	A) 10 cm	1	-3
form ight*	Recovery Weight*	Typical Rate**	Length (meters)	1	_
ams)	(grams)	Rate	(meters)		<u>ə</u>
4	20	52	1	\$9.95	\$8.95
8	35	46	1	9.95	8.95
28	150	33	1	9.95	8.95
()	220	20	1	0.05	0.05

Muscle Wires® Project Book

Get the facts behind the unusual properties of Muscle Wires®. Study their uses in heat engines, industrial, medical and aerospace applications, electronic and mechanical devices, prosthetic limbs, robotics, virtual reality systems, and more!



Part No.	Description	1	5
141330	Muscle Wires® Book\$17	7.95	\$15.95

Muscle Wires® Book & Deluxe Kit

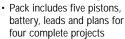
- Includes (1) each Flexinol 037, 050, 100, 150 and 250 (see above), and Project Book (see above)
- · Includes crimps and instructions
- · 5 meters of wire

Part No.	Description	5
141348	Muscle Wires® kit\$59.95	\$53.95

Electric Pistons™ (Deluxe 5-Pack)

The Electric Piston is a oo shape memory alloy actuator that pulls with up to one pound of force and contracts by 20mm. Typical activation requires just one volt at five amps for two seconds. Plus, mount several pistons in parallel for more strength,

and in series for longer strokes.



 1 volt @ 5 amps · Weight: 0.3 lbs. Part No. Description

141903 Electric piston pack\$39.95 \$34.95

Modulated Infrared Reflective Detector

- · Operating voltage: 5VDC
- · Detects objects up to several inches away
- Modulated signal reduces response to ambient infrared noise
- Size: 0.9"L x 0.8"W x 0.4"T Weight: 0.2 lbs.

Part No. Description \$22.95 \$19.95 163221 Modulated detector.....

Space Wings Kit

Sleek silvery mylar wings flap silently using only five centimeters of Muscle Wire®. Stands 15 cm tall and flaps up to 36 times per minute. Includes a printed circuit board, parts

and detailed instructions.

· Assembly requires soldering iron, solder, screwdriver, wire cutters and two AA batteries (not included) • Weight: 0.06 lbs.

Part No. Description **141313** Space wings kit..... .\$19.95

Mini Dual H-Bridge Driver Kit



- · Uses standard 5V logic level inputs
- · Provides up to 300mA per motor
- · Inputs use less than 1mA
- Size: 0.9"L x 0.8"W x 0.4"T Weight: 0.2 lbs.

Part No. Description 160047 Mini dual H-bridge driver kit \$24.95 \$22.49

Crossbow Digital Accelerometer Interface Card

- Measures and observes acceleration, impact, tilt, vibration, and other acceleration-related physical phenomena
- Simple digital interface for 1-axis P/N 141591 and 3-axis P/N 141575 accelerometers (below)
- Plugs into any RS232 port 38.4K baud
- 200Hz max. sampling rate
- Includes user friendly graphical software and 9VDC @ 500mA power supply
- Requires DE9 (male female) cable recommend P/N 25700 for DE9 cable (pg 181)

Size: 3.0"L x 2.5"W x 1.3"H • Weight: 0.2 lbs.

Description 141583 Digital interface card\$249.95 \$224.95

Crossbow Accelerometer Modules

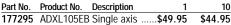
1-Axis and 3-Axis

- Dynamic range, excellent frequency response, easy to interface to a standard acquisition systems
- Requires a 5VDC power supply (not included)
- Shielded cable: 2'L pigtail Dimensions: 1.9"L x 1.0"W x 0.8"H
 Weight: 0.1 lbs. Part No. Product No. Axis Current \$99.95 **141591** CXL04M1 One 8mA.....\$109.95 141575 CXL04M3 Three 24mA.....249.95 219.95

Crossbow Evaluation Board

Evaluation board for the ADXL105, single axis,

5g accerometer. Part No. Product No. Description



Crossbow Evaluation Boards

Evaluation board for the ADXL202 dual axis, 2g accerometer.

P/N 177308: features RS232 interface to connect to PC serial ports. Also

includ	es sonware i	110 870	and the second	
time acceleration data.			177	7308
art No.	Product No.	Description	1	10
77287	ADXL202EB	Dual axis	\$49.95	\$44.95

Part No.	Product No.	Description	1	10
177287	ADXL202EB	Dual axis	\$49.95	\$44.95
177308	ADXL202EB-23	2 Dual w/RS23	2 119.95	107.95

Crossbow HF Series Accelerometer

- Axis: Z Easy to use
- · Resolution: 300 uGrms
- · Low noise, wide bandwidth
- ±10g and ±100g ranges

· Constant current or constant voltage excitation Part No. Product No. Description

177324 CXL10HF1Z Z axis......\$159.95 \$143.95

Crossbow BNC Adapter Box

- **Enables any Crossbow accelerometer** without a regulator (the R-option) to be interfaced directly to most standard data acquisition systems
- · Easy-to-use BNC outputs
- Molded plastic enclosure with three standard BNC female connectors and an on-off switch
- Compatible with oscilloscopes, chart recorders and other test equipment 9V battery or external power

		p		
Part No.	Product No.	Description	1	10
177316	CXBNC	BNC adapter	\$99.95	\$89.95







13.45



















141575

Temperature Controlled Soldering Station

ESD Safe Station

- · Temperature controlled hand soldering
- · High insulation/long life ceramic heating element
- · Accurate heat sensing and compensation
- · Thermal control adjustable from 150°C to 450°C (300°F to 850°F) and maintained within ±3°C (±6°F)
- · ESD safe and spike free circuitry
- · Temperature lock to prevent unwanted adjustments
- External calibration port
- · LED indicator to indicate power on (green) or heater on (red) CUL listed
- · Includes instruction manual and Allen wrench • Size: 7.7"L x 5.3"W x 3.8"H Weight: 4.7 lbs.

Part No.	Product No.	Description	1 10
168719	XY136ESD	Station\$99.9	5 \$89.95



Thermally Balanced Soldering Iron

The XY200GX is a thermally balanced soldering iron for the



- professional or hobbyist. • 120VAC; 6' cord • 25 watt power consumption
- Interchangeable tips (pg 122)
- 1.6mm conical tip included One-year warranty
- UL listed Length: 8.0" · Weight: 0.6 lbs. Part No. Description 129040 25W solder. iron\$12.95 \$11.49 \$10.49

Soldering Iron, Stand & Sponge

116572: (JS1258)

- · 16-30 watt variable
- Lgth: 7.5" Wt.: 0.6 lbs. 36329: (100S)
- · Black anodized steel base -5.3"L x 3.3"W
- · Includes sponge (SP715)
- · See below for replacement sponge (P/N 134631)
- · Fits most soldering irons .85" diameter • Weight: 0.5 lbs.

To diameter Trongitti ete iber		
Part No. Description 1	10	100
116572 Soldering iron\$19.95	\$17.95	\$15.95
36329★ Soldering stand3.49	2.95	2.49
134631 Sponge (for 100S)1.49		.99

One-Shot Desoldering Gun

This low maintenance desoldering gun with self-contained vacuum pump is perfect for desoldering throughhole components.

- Power consumption: 60W
- 120VAC
- · Ergonomic, lightweight design
- · Interchangeable standard tips 1.0mm tip included
- · Zero static tip, 3 wire grounded
- · Sensitive where CMOS protection is needed
- · Quick release stainless solder collector
- Electronic temperature control One-year warranty
- Gun casing size: 7.0"L x 4.0"W Weight: 2.2 lbs.

Part No.	Description	1	10	25
129066	Desolder gun	\$99.95	\$89.95	\$79.95
140214	"Y" replace	9.95	8.95	7.95
134594	1.0mm rep. tip	7.95	6.95	5.95
134607	1.2mm rep. tip	7.95	6.95	5.95

Weller 60 Watt Controlled Output **Soldering Station**

- · 120VAC @ 60Hz input; 24V output
- Transformer powered soldering station complete with macro style, low voltage, temperature controlled soldering iron



- Closed loop method of controlling maximum tip temperature – for protection of temperature sensitive components . Power unit housing features impact resistant plastic for durability
- Quick disconnect plug for soldering iron and lighted on/off switch UL listed
- Separate conductor grounds iron tip and terminates third pin of power cord Uses PT series tips
- Size: 5.9"L x 4.5"W x 3.6"H Weight: 4.0 lbs.

Part No. Product No. Description **170552** WTCPT Solder station....\$149.95 \$134.95

Weller Soldering Station

- 40 watts, 120V @ 60Hz
- Lighted on/off switch
- · Adjustable power from 5 watts - 40 watts
- Temperature is electronically controlled from 350°F to 850°F
- Includes ST3 1/8" screwdriver tip, soldering station, soldering handle and manual • UL listed • Wt.: 1.9 lbs.
- Size: 5.5"L x 4.5"W x 3.5"H One-year warranty Part No. Product No. Description

146595 WLC100 Soldering station...\$49.95 \$44.95

Weller Soldering Station ESD Safe

Temperature Controlled

- 50 watts of controlled power
- Temperature lockout prevents raising of temperature to high levels

116572

(SP715)

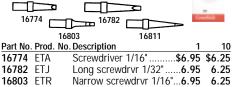
134631

- Temperature calibration allows user
- to reset temperature to match tip styles and sizes Quick heat-up and temperature recovery
- Accuracy within 9°F (5°C) Automatic shut-off
- Temperature range: 350°F 850°F (177°C 454°C) UL/CUL approved · One-year warranty
- Size: 5.9"L x 4.5"W x 3.6"H Weight: 4.2 lbs.
- Part No. Product No. Description

Soldering station \$119.95 \$109.95 **166879** WES50

Weller® Soldering Tips Replacement Tips for WES50

- · Tip leakage: less than 2mV
- Tip to ground resistance: less than 2Ω
- Tips also used with WCC100 station
- · Additional tips can be special ordered
- · Weight: .02 lbs.



16811 ETS Long conical 1/64".....6.95 Replacement Tips for WLC100

1466	508	146616	1466	24
Part No.	Product No.	Description	1	10
146608	ST1	Screwdrvr tip 1/16	5" \$5.95	\$4.95
146616	ST3	Screwdrvr tip 1/8'	'5.95	5.35
146624	ST7	Conical tip 1/32"	5.95	4.95

Weller Light Duty 23 Watt Soldering Iron

(آل)

- · Ideal for hobby or electronics kit work
- 1/8" removable tip
- 120VAC, 60Hz
- · Additional tips can be special ordered
- · Length: 8" · Weight: 0.2 lbs.

Description 152872 Solder. iron (SP23)..\$14.95 \$13.49 \$11.95

Weller Professional 25 Watt Soldering Iron

- 120VAC @ 60Hz
- Interchangeable heater elements - provides user with a trio of different jobs · Quick change knurled collar
- · Lightweight handle with cushioned grip
- Includes 3-conductor power cord
 UL listed
- · Length: 9" · Weight: 0.3 lbs.

Part No. Product No. Description 170587 WP25 25W solder iron .. \$34.95 \$31.95

Weller 40 Watt Soldering Iron

- 120VAC @ 50/60Hz
- · Ideal for hobby and electronic work
- · Develops 900°F / 482°C of heat
- MT10 1/4" / 10mm diameter replaceable nickel plated copper tip · Stainless steel barrel
- · Heat and impact resistant handle
- Length: 8.25" Weight: 2.3 lbs. UL listed

Part No. Product No. Description 170561 SP40 40W solder iron...\$19.95 \$17.95

Weller® Desoldering Gun Kit

- 120VAC
- · Ideal for light duty production and in-field repair
- Portable desoldering
- · Disposable solder collector
- · Lighted power switch
- · Heats up to over
- 800°F in minutes · Includes tiplet clean out tool and 2 collector tubes
- Size: 8.7"L x 9.2"W x 3.3"H Weight: 3.0 lbs.

Part No. Product No. Description 170579 SCD100 Desolder gun\$199.95 \$179.95

Weller Multifunction Heating Tool Kit

- · Self igniting and instant heat
- Adjustable temperature (25W to 125W)
- · Auto switch off
- · Visible gas level of IN TANK
- · 2 hours of heat on average tank setting
- Includes soldering tool, hot blower tip, hot knife tip, 2.4mm and 4.8mm double flat tip, cleaning sponge, storage case and instruction manual
- · Additional tips can be special ordered
- · Weight: 1.0 lb. · One-year warranty

Description Multifunction heating tool...\$89.95 \$79.95 152207





Soldering Equipment

Analog Display Soldering Station

Maintains a steady temperature using a cartridge heating element, providing a longer life for the solid soldering tip.

Electronic temperature control from 300°F to 850°F

· Zero-voltage thyristor switching protects voltage and current sensitive devices such as CMOS ICs against voltage spikes

· Power-on and Heater-on LED indicators

· Power consumption: 60 watts

Includes one 1/16" tip (P/N 35115 – below)

· See below right for replacement sponge

· UL listed

• Size: 4.3"W x 6.0"D x 3.4"H • Weight: 4.1 lbs.

Part No.	Product No.	Description 1	10	25
114569	XY1683C	Analog display station\$89.95	\$79.95	\$72.95
183177	XY960A	Analog display station109.95	99.95	89.95

114569

125508 (Desolder Station)

Size: 9.2"L x 7.2"W x 3.6"H

125516 (Combo Solder/Desolder)

Size: 11"L x 10"W x 4"H

183177

Combo Soldering/ **Desoldering Station and Desoldering Station**

· XY968D: Digital Fahrenheit/Centigrade read out

XY968D/XY999SDA: Anti-Clog/Energy Saver

· Maintenance free, quiet operation

· Simple fine tune feature to select 300°F - 850°F range

· Vacuum pump activated "on demand" using finger tip switch on desolder handle

· Spike control feature protects current sensitive components such as CMOS ICs

· Rapid heat-up/recovery design sensor monitors tip to detect extremely small temperature deviations

• See right for replacement sponge (P/N 134631)

One-year warranty

,	Product No.	Description	Wt. (lbs.)	1	5
125508	XY968D	Desoldering station	13.1	.\$299.95	\$269.95
125516	XYT988	Soldering/desoldering station	18.1	399.95	359.95

SMD Tweez Iron

· Maximum efficiency ceramic heating elements insures rapid heat-up and instant heat recovery

 120VAC • Max. temp.: 760°F • Heater insulation exceeds $100M\Omega$

 Heater 	Jowel Collsul	nphon: 35W X Z •	or abbrosed			
Part No.	Product No.	Description	Wt. (lbs.)	1	10	25
168410	TWZ236	SMD tweez iron	0.9 \$59	.95	\$53.95	\$48.95
168583	46-060102	Tip .078" for P/N 1	68410 .02 9	.95	8.95	7.95
168591	46-060115	Tip .590" for P/N 1	68410 02 10	.95	9.95	8.95

168583

Digital Display Soldering Station

The XY960-ESD Digital Display Soldering Station is designed for soldering situations where precise temperature is required for sensitive components.
• Easy to read .560"H 3-digit LED readout

Temperature is maintained at ±6°F tolerance of the set temperature

Electronic temperature control from 200°F to 878°F

External calibration port

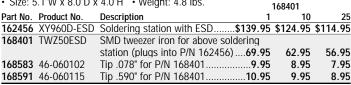
Zero-voltage thyristor switching protects voltage and current sensitive devices such as CMOS ICs against voltage spikes

Power-on and Heater-on LED indicators

Power consumption: 60 watts • UL listed Includes one 1/16" tip (P/N 35115 – below)

See below for replacement sponge (P/N 134631)

Size: 5.1"W x 8.0"D x 4.0"H • Weight: 4.8 lbs.



Temperature Controlled Soldering Station

Grounded Soldering Tip

Temperature controlled hand soldering

Insulated ceramic heating element for rapid heat-up and heat recovery . Fully grounded

Heater insulation exceeds 100MΩ

Thermal control adjustable from 250°C to 450°C (500°F to 850°F)

Ergonomic mini handle • UL listed

Zero voltage circuitry eliminating high voltage spike and magnetic field generation

Soldering handle is attached to the base with silicone rubber grounded power cord

Includes instruction manual • Size: 7.0"L x 4.5"W x 3.5"H

P/N 156814: standard tip for 156785

Part No.	Product No.	Description	Wt. (lbs.)	1	10	25
156785	XYT379	Soldering station	2.5\$	59.95	\$53.95	\$48.95
156814	44-510601	Sharp conical 1/32"	.02	3.95	3.49	2.95
156822	44-510604	Chisel conical 1/16"	.02	3.95	3.49	2.95

Accessory Sponges

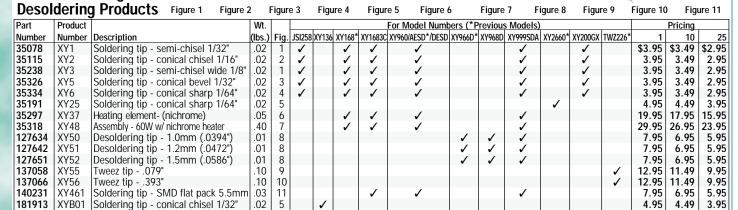
P/N 134640 for models XY168, XY1683 and XY1683C

P/N 134631 for models XY960, XYT379, 221 pg & John & 2001 VV bnc 045VV

X1307	and Anno	JJ (above & pg 121)		-	
Part No.	Product N	lo.Description	1	10	100
134640	SP815	48mmL x 48mmW sponge	\$1.49	\$1.25	\$.99
134631	SP715	48mmL x 52mmW sponge	1.49	1.25	.99

134631

Tips & Replacement Parts (for above) XY Series Soldering &



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156785

WAHL® Cordless Soldering Irons

- 900°F tip temperature
- · Iron performance equivalent to 25 watt iron
- · Includes soldering iron, recharging stand, Ni-Cad battery pack, and tips
- · One-year warranty

IsoTip® Quick Charge Soldering Iron

Model #7700

- · Recharges in 3-4 hours
- · Solders continuous up to 20 minutes or 120 joints per charge • Weight: 1.1 lbs.

Part No.	Description 1	10
132775	Quick-charge cordless iron \$49.95	\$44.95

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IsoTip® Power Pro Soldering Iron

Model #7904:

The #1 choice for field service soldering!

- · Solders 200+ joints or up to 30 minutes of continuous soldering
- · Recharges in 3-4 hours
- · LED indicator light
- · Weight: 1.1 lbs.

Part No. Description 132783 Power Pro cordless iron\$69.95 \$62.95

WAHL® Mini Portable Torch

- Electronic ignition
- · Runs approximately 20 minutes of continuous flame per cartridge
- · Uses regular lighter refills
- · Maximum temperature range: 1300°C / 2375°F
- Size: 2.0"W x 0.8"D x 4.4"H
- · Weight: 0.3 lbs.

Part No. Description

152215 Portable mini torch......\$19.95 \$17.95

WAHL® Portable Heat Gun

- · Portable and flameless heat
- Temperatures up 1200°F (650°C)
- Typical applications: shrink tubing, activate adhesives and potting compounds, form plastics and laminates and preheat flux
- · Each cartridge (disposable butane lighter) provides approximately 20 minutes of heat
- · Includes disposable gas lighter
- · Weight: 0.3 lbs. Electronic ignition
- Size: 4.8"L x 0.9"W · One-year warranty

Part No. Description

150691 Portable, flameless heat gun..\$29.95 \$26.95

IAMECO Heat Gun

- · Use with heat shrink material
- · Works with spot-dry paint, plaster, spackle cure adhesives
- · Will remove
- adhesive-applied tiles and linoleum without chipping
- Dual heat setting: 600°F/1100°F
- · Can thaw pipes, frozen locks and loosen rusted bolts
- UL listed Weight: 1.8 lbs. Size: 9.3"L x 7.0"W

Part No.	Description	1	10	2
76865	Heat gun	\$39.95	\$35.95	\$31.9

JAMECO Electric and **Non-Electric Desolder Pumps**

· Easily disassembled for cleaning · One-hand

operation



· Replacement tips available

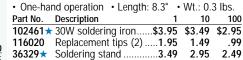
19254: • UL listed · Weight: 0.5 lbs.

19166 Size: 10.5"L x 1.0"Dia. 19166: • Size: 7.8"L x 0.8"Dia. • Wt.: 0.2 lbs.

Part No.	Description	1	10
19254	Electric desolder pump	.\$26.95	\$23.95
19166*	Non-electric desolder pump	4.95	4.49
22091	(2) tips for 19166	2.95	2.49
19262	(1) tip for 19254	3.95	3.49

JAMECO Soldering Iron and Stand

- 30 watt
- · UL approved
- 102461 • 1/4" removable tip • Ideal for precision work



Multifunction Heating Tool Kit

Multifunction hobby tool for soldering, woodburning, leather crafts and stencil cutting; works as a hot knife.

- · 120VAC, 25W heating element
- · Contains the following tips:
- Three solder tips: cove type, fine point, chisel type
- Hot knife holder blade
- Four craft tips: general purpose point, grading point, script point, dot point
- · Includes solder & heating tool stand · UL, CSA listed
- · Weight: 0.5 lbs. · One-year warranty

Part No.	Description	[*] 1	10			
129015	Multifunc. heating tool	\$12.95	\$11.95			

AMECO Ultrasonic Steri-Cleaner

- · Power: 80W
- · Operating freq: 46KHz
- Pwr supply: 110VAC @ 60Hz, standard 2-prong 6' cord
- Tank capacity: 0.5 gallons
- Size (unit): 6.8"W x 6.5"D x 8.0"H
- Size (tank): 6.0"W x 5.4"D x 4.0"H

One-year warranty • Weight: 4.3 lbs. Part No. Description

149841 Ultrasonic steri-cleaner \$249.95 \$224.95

Soldering Tip Cleaner w/ Stand

- For cleaning soldering iron tips without the use of water and sponge
- · Rubberized base for stability
- · Metal wool for cleaning
- Size: 3.5"Dia. x 1.5"H Wt.: 0.5 lbs.

Part No.	Description	1	10	5
156777	Tip cleaner 8	& stand\$6.95	\$6.25	\$5.5
160004	Metal wool re	eplacement 2.49	2.25	1.9

. IAMECO 300 Watt Solder Pot

Temperature Regulated between 420°C - 450°C

- Input voltage: 110VAC @ 2.7A; 50/60Hz
- 2 conductor power cord; 5' 9" long
- · HI/LO switch selectable for temperature
- · Holds up to 1 bar of P/N 170464 or 176057 (below)
- One-year warranty
- Size: (tub) 2.4" Dia. x 1.6" Deep
- Size: (unit) 4.8"H x 5.5" Dia. (base) Weight: 5.9 lbs. Part No. Description 10 300W solder pot \$59.95 \$53.95 \$48.95 160303

, JAMECO 600 Watt Solder Pot **Temperature Adjustable**

- Input voltage: 110VAC @ 5.5A
- · 2-prong power cord (5'5")
- Tin boiler temp.: 0°C to 500°C
- Self regulating temperature
- · Includes skimmer and removable dross tray · Weight: 7.4 lbs.
- · On-off power switch and LED indicator for heat
- Holds up to 3 bars of P/N 170464 or 176057 (below)
- Size: (tub) 3.9"L x 1.6"D; (unit) 6.8"L x 5.5"W x 2.8"H Part No. Description

172275 600W solder pot......\$189.95 \$159.95

JAMECO 2000 Watt Solder Pot

- · Input voltage: 110V @ 18A 60/50Hz single phase
- · 3 conductor pigtail power cord: 5' long
- Thermostat control for setting temperature from 50°C to 300°C
- Holds up to 48 bars of P/N 170464 or 176057 (below)
- Size (unit): 18.1"L X 11.5"W X 6.0"H
 Wt.: 23.1 lbs.
- Size (tub): 12.0"L X 8.0"W X 2.9"H One-year warranty Part No. Description

149876 2000 watt solder pot\$329.95 \$299.95

JAMECO Solder Bars

- Used for soldering pots
- · Tin/lead

(ŲL) **(SP**

• Sizo: 13"L v ∩ 0"Dia

3120. 13	L X O. / Dia.
Weight:	1.1 lbs.
Part No.	Description

176057 Solder bar (60/40).....\$6.95 \$6.25 170464 Solder bar (63/37).....14.95 13.49

J<u>AMECO</u>° Solder Stand

Solder not

- 12 pc. solder stand (some assembly required)
- Size: 3.6"W x 3.9"D x 4.3"H
- · Shaft diameter: 0.6" · Weight: 1.6 lbs.

Part No. Description 141760 Solder stand\$8.95 \$7.95 \$6.95

JAMECO Solder Spool & Iron Stand

- 4 pc. stand (some assembly required)
- Shaft diameter: 0.6"
- Size: 6"L x 3.5"W x 3.1"H Sponge size: 1.6"W x 2.4"L
- · Weight: 2.0 lbs.

Part No. Description 169551 Spool and iron stand...\$12.95 \$11.95 \$10.95





170464





124 Soldering Equipment

TX Fume Extractors and Filters

Absorbs noxious lead fumes using activatedcarbon filter and a high efficiency fan

- · Operate continuously providing filtered air
- · Air flow: 115 CFM
- · Compact size allows use on work bench with minimum space
- · 120VAC, 60Hz, 22 watt
- · On/off power switch
- · Aerodynamic hood design for effective removal of solder fumes
- · Noise: 49dB fan
- · Fuse protected
- · Includes detachable power cord
- · Removable carbon impregnated filter
- · Static ground jack
- One-year warranty

168268:

- · High carbon plastic case
- Size: 8.5"W x 5.0"D x 8.0"H Weight: 4.2 lbs. 120150:
- · Black anodized aluminum case
- Size: 6.4"W x 4.6"D x 7.9"H Weight: 4.6 lbs.

Part No.	Description	1	10	25
168268	Fume ext. (ESD safe)	.\$59.95	\$53.95	\$49.95
120150	Fume extractor	79.95	71.95	64.95
127183	Replace. filters (2/pk)	9.95	8.95	7.95



Plastic Pump Bottle

- · 6 oz. bottle · ESD compliant
- · Plastic bottle with dispenser cover
- · Weight: 0.2 lbs.

Part No.	Description	1	10	50
158131	Pump bottle\$	9.95	\$8.95	\$7.95

7 Piece Soldering Aid Kit





100503 contains:

- Soldering wick 3 piece scraper set
- · Acid brush · Clip on heat sink · Empty squirt bottle Part No. Description Wt. (lbs.) 1 10 100378 Heat sink 0.01....\$.69 \$.59 \$.49 \$.39 100503 Soldering kit 0.2....5.95 4.95 4.79 4.29

2 Piece Electronic Inspection Set

- · Sharp metal pick (0.1"Dia. x 6.0"L) great for PCB re-work
- Bent mirror tool (0.1"Dia. x 6.8"L) for visual inspection • Weight: 0.1 lbs.

Part No.	Description 1	10
72514	Electronic inspection set\$3.95	\$3.49

(H) Clip-On Heat Sink

- · Absorbs and dissipates heat during soldering and desoldering sensitive parts
- Size: 2.7"L x 0.7"W

Part No.	Product No.	Wt. (lbs.)	1	
159126	HT156	0.04	\$1.95	\$1.

and JAMECO Rosin Core Solder Rolls and Pocket Paks





Part No.	Mfg.			sition Silver	Dia. (In.)	Wt. (lbs.) 1	10	50	100
73576	Kester (pak)	60	40	0	.031	0.04 \$1.25	\$1.09	\$.99	\$.79
32117	Kester	60	40	0	.031	1.00 11.95	10.95	9.95	8.95
73605	Kester (pak)	62	36	2	.020	0.10 1.75	1.49	1.25	.99
112344	Kester	63	37	0	.020	1.10 15.9 5	14.49	13.95	12.95
151474	Kester	63	37	0	.031	1.00 11.95	10.95	9.95	8.95
170456	Jameco (pak)	60	40	0	.031	0.06 .99	.85	.69	.55
141794	Jameco	60	40	0	.031	0.55 4.95	4.49	3.95	3.49
141786	Jameco	60	40	0	.031	1.10 7.9 5	6.95	6.25	5.59
141778	Jameco	60	40	0	.031	2.20 13.95	12.95	11.95	10.95

168268

120150

Rosin Paste Flux

A highly active non-corrosive flux with excellent wetting action. Specifically for electrical/electronic applications. Permits soldering of even difficult metals such as brass or nickel.

Non-corrosive & electrically non-conductive.

· Weight: 0.2 lbs.

Part No.	Description 1	10	100
73584	Rosin paste flux\$1.19	\$1.09	\$.99

Lead-Free Solder Tip Tinner

Use will prevent oxide buildups and tin depletion on the tip which will increase tip life, and heat transfer resulting in a better solder joint!

· 0.7 oz. tin with self adhesive pad

· Weight: 0.06 lbs. Part No. Description 132986 Lead-free tip tinner..... ..\$4.25 \$3.95



· Quick and easy to use

- · Uses simple equipment and materials for application and clean-up
 - Potential damage to printed circuit boards is eliminated
- 2.5' of CHIPQUIK® material removes 1250-1500 SMD pins • Weight: 0.1 lbs.

Part No. Description SMD removal kit....\$19.95 \$17.95 \$15.95 141305

JAMECO 5' Desoldering Braids

- Easy to use handy dispenser
- Braided copper with flux
- Weight: 0.03 lbs.

J				
Part No.	Description	1	10	100
41081	.079"W braid (5')\$.9	99	\$.79	\$.65
41099	.098"W braid (5') 1.0	09	.89	.7!
153461	.120"W braid (5')1.2	25	1.09	.99

теньргат 6' No-Clean Desolder Braids

Meets all of the most stringent soldering standards for worldwide application including: MIL -F-142560D Type R





WILL-1-142000D Type IC,								
NASA:	specification	NHB5300.4	4,	6' fo				
NPC20	0-4 and SP-5	002. • Lenc	th: 6'	price	of 5'!			
	Description			10	100			
139951	.030"W braid	0.02 \$2	.25	1.95	\$1.75			
124126	.060"W braid	0.01 2	.25	1.95	1.75			
124118	.085"W braid	0.02 2	.25	1.95	1.75			

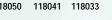
JAMECO Desoldering Wick

No more burnt fingers

- · Length: 5' • 0.067" wide
- Handy dispenser Weight: 0.05 lbs.
- Pure copper braid No clean flux formula Part No. Description 175986 0.067" braid\$2.25 \$1.95 \$1.75

TECHSPRAY Workshop Products







- · EPA SNAP approved, no CFCs or HCFCs
- · NOTE: Shipped via UPS ground only

Safe on plastics

Dusting Gas

· Acc-u-sol trigger 10 oz. aerosol can Part No. Description Wt. (lbs.) 139900 Dusting gas w/ trigger 0.8 \$6.95 \$6.25

Cleaner Degreaser

 Rapid evaporation • 10 oz. aerosol can Wt. (lbs.) Part No. Description 118050 Cleaner degreaser 0.8 \$8.95 \$7.95

Flux Remover

· Dissolves type R, RMA, RA, SA and most no-clean fluxes • 10 oz. aerosol can

Part No.	Description	Wt. (lbs.) 1	12
118041	Flux remover	0.8 \$9.95	\$8.95
			•

Contact Cleaner

- · Ideal for switches, relays, contact pads and other places of electrical connections
- · 10 oz. aerosol can
- · Solvent will not damage switch housings

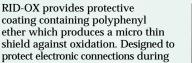
Part No.	Description	Wt. (lbs.) 1	12
118033	Contact cleaner	0.9 \$8.95	\$7.95

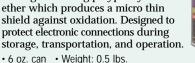
Envi•Ro•Tech™ Freezer

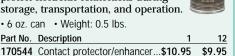
Rapidly evaporating liquid that can chill to -62°F. • 10 oz. aerosol can

Part No. Description Wt. (lbs.) Envi•Ro•Tech freezer 139934 0.8 **\$7.95 \$6.95**

TECHSPRAY Contact Protector/Enhancer







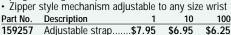
See pages 121-123 for additional soldering equipment





3M Wrist Strap for Static Protection

- Rubberized wrist strap for comfort
- $1M\Omega$ resistance for static dissipation • Length: 5'
- Coiled cord with a banana plug and alligator clip



3M Field Service Kit

This kit provides all the basic items needed to create a staticsafe work environment for field service work. The kit includes a 3M adjustable Wrist Band 2204, ground cords, and a static-dissipative work surface.



Part No. Description 159994 8506 field service kit. .\$38.95 \$34.95

<u>JAMECO</u> Protective Coiled Wrist Grounding Strap

- · Comfortable, adjustable Velcro wrist strap
- · The coiled cord has banana plug and alligator clips
- Includes a 1MΩ resistor for added safety
- Extended cord: 9' long Color: black Wt: 0.1 lbs. Part No. Description 10 **34551★** Anti-static strap**\$6.95** \$5.95



- · Discharges static without restricting your mobility
- static sensitive devices
- · Ground strap: 15.5"L
- · Color: black · Weight: 0.1 lbs. Part No.

Heel strap\$5.95 100327 \$5.35 \$4.75

Ideal for anyone handling Description

J<u>AMECO</u> Anti-Static Work Mats

Make your work environment safe from static discharge! These mats are made of attractive looking semiconductive vinyl that provides adequate discharging,



yet will not short leads or pins. Includes grounding clip • Color: gray

moraa	os grounanig	one core	1. g. u	,	
Part No.	Dimensions	Wt. (lbs.)	1	10	100
10575	11.3" x 22"	0.7\$	8.95	\$7.95	\$6.95
10583	19.5" x 23.5	" 1.1 1	1.95	10.49	9.95
168508	24" x 28"	1.8 1	2.95	11.49	9.95

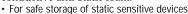
JAMECO Anti-Static Touch Pad

- Pad has 1MΩof resistance
- · Coiled ground strap with removable alligator clip, 6'L
- · Color: blue
- Size: 15.0"L x 0.5"W Weight: 0.1 lbs.

Part No. Product No. Description JE1215 Anti-static pad \$4.95 \$4.49 \$3.95

JAMECO Conductive Anti-Static Foam and Bags

Don't get zapped! Protect your investment with these inexpensive bags and ensure a safe work area with our conductive anti-static foam.



• Size: ((13864) 24.0"L x 1	12.0"W x 0.3	3"H	-	78668
Part No.	Description	Wt. (lbs.)	1	10	100
13864	Anti-static foam	0.1 \$7.	95	\$6.95	\$5.95
78668	4x6 anti-static ba	gs .01	29	.25	.19
78650	8x10 anti-static ba	ags .02	59	.49	.39

STATICO ESD Common Point **Grounding Cord**

- 15 ft. long table mat/wrist strap common point grounding cord
- One end provides a 3/8" (10mm) female socket to snap-on the ESD mat and two wrist strap banana connection receptacles, one for operator and one for guest and a No.10 ring terminal at the other end furnishes the means for ground connection

Part No. Product No. Description 10 176137 S1030NRF Grounding cord\$10.95 \$9.95

STATICO 4-Point Common Point Grounding Cord

- · 15 ft. long straight cord common point ground
- · Ideal for multiple grounding
- Grounds up to 4 wrist straps through 4 banana receptacles
- Grounding end termination is a banana plug
- · Provides a direct path to ground

Part No. Product No. Description **176129** S1046 Grounding cord \$11.95 \$10.49

STATICO Dual Wrist Strap **Grounding Block**

- · Provides two grounding points for wrist straps
- · 15 ft. long green cord for direct path to ground
- · Wrist strap cords can be snapped on to the two male snaps provided, while the operator is away from the work bench
- An extra No. 10 ring terminal is included for alteration

Part No. Product No. Description **176145** S1045 Grounding block...\$12.95 \$11.49

STATICO Wrist Strap Tester

- Easy to use on-demand tester for wrist grounding straps
- Tests in two ranges: $750k\Omega$ – $10M\Omega$ and $900k\Omega$ – $35M\Omega$
- Indicates test status through LEDs for high fail, low fail, pass and low battery
- · Includes 9V battery
- Checks wrist straps for $1M\Omega$ current limiting resistor, skin contact and continuity

Part No. Product No. Description Wrist strap tester..\$99.95 \$89.95 **176153** S2111

STATICO ESD Disposable Heel Grounding Strap

- Easy to use, peel-off adhesive strip
- Most convenient for visitors/guests
- Ideal for temporary/one time use 10 pack
- 1X10E6 ohm/linear foot • 11.75"L x 0.6"W Part No. Description **181930** Disposable heel strap.......\$6.95

STATICO ESD Disposable Wrist **Grounding Strap**

- · Most convenient for visitors/quests
- · Ideal for temporary/one time use · One size fits all
- · 36"L x 0.25"W Part No. Description 181921 Disposable wrist strap ..\$1.49 \$1.39 \$1.19

STATICO Static Eliminator, **Bench Model Ionizer**

· A highly reliable blower for static elimination featuring a variable speed fan, an integral air flow diffuser and a separately controlled heater for operator comfort



- Provides a powerful airflow w/ very low noise level
- · Overhead mountable on walls or pedestals
- Self balancing: maintains 0 ±5 volts balance at all normal operating conditions
- 80-160 cubic ft/minute air volume
- 550 ft/minute @ 2 ft air velocity at maximum fan speed • Line voltage: 115VAC; 50/60Hz
- · 60° ionized air coverage angle
- · 63 dBa max @ 2 ft noise level
- · Ozone per UL 867 requirements
- Size: 10.0"L x 12.0"W x 6.3"H Weight: 8.0 lbs.

Part No.	Description	Price
176111	Static eliminator, ionizer	\$499.95

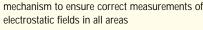
STATICO Surface Resistivity/ Resistance Checker

- Easy to use tester to quickly determine the resistivity/resistance of the ESD surfaces
- · Colored LEDs indicate test results
- · With two brass bars, employs the ASTM Standard D257 method of parallel sensing
- · Tests surfaces for 3 ranges of conductive, static dissipative and insulative
- Tests resistance to ground through a connecting • Size: 5.1"L x 2.8"W x 1.0"H lead (provided)
- Includes 9V battery and leather case
 Wt.: 0.6 lbs.

Part No.	Description 1	10
176161	Resistance checker\$329.95	\$299.95

STATICO Digital Electrostatic Fieldmeter

- · Locates and measures static charge potentials on products, people, equipment, and packaging
- Utilizes a non-contact, chopper stabilized field sensor, a ranging light



- · Can be used in ionized environments
- Housed in a conductive, impact-resistant case and includes ground lead
- Features on/off slide switch, sample/hold pushbutton and zero control knob • Operates at 0-40°C
- Measurement range +/-0.00 to 19.99KV @ 1"
- · Includes 9V battery and leather case
- Size; 4.2"L x 2.4"W x 0.9"D Weight: 0.3 lbs.

Part No.	Description	1	10
176170	Electrostatic fieldmeter	\$529.95	\$479.95

JAMECO Clamp Vise

- · Lightweight, sturdy construction
- · Nylon jaws open 2"
- · Ball cup allows vise to adjust to any angle
- · No tools needed finger turn to tighten
- Size: 10.0"L x 2.5"W Weight: 2.1 lbs.

Part No. Description Clamp vise. .\$19.95 \$17.95 127167

. **JAMECO** Third Hand

- · Frees hands for soldering
- · Two adjustable arms with alligator clip jaws
- · 2" diameter magnifying lens
- · Quick and easy rotation · Sturdy, heavy base
- · Weight (P/N 26690): 0.7 lbs. (P/N 72864): 1.4 lbs.

Description Part No. 26690 Third hand\$4.95 \$4.49 \$3.95 W/ soldering holder......6.95 72864 6.25 5.59

Vacuum Vise

- · Features the patented "split ball" that tilts, turns and rotates through three planes
- · Nylon jaws open a full 2.25"
- Powerful suction pad for quick and easy set-up
- Size: 5.0"L x 4.0"W x 6.3"H
- · Weight: 3.3 lbs. · One-year warranty

Part No. Product No. Description **27131** M381 .\$59.95 \$53.95 Vacuum vise......

Electronic Work Center

- · Circuit board holder, standard base, tray base mount, solder station, sponges, and wire holder included
- · Size: 8.5"W x 7.8"H
- · Weight: 5.3 lbs.
- · One-year warranty

Part No. Description

27060 Electronic work center..\$79.95 \$69.95 \$64.95

PVjr. Vice

- · Jaw opening: 2.8"
- Jaw size: 1"W x 2"T
- · Jaw heat tolerance: 350°F
- · Vertical/horizontal jaw grooves
- · Fine/course adjusting knob
- · The vise neck tilts, turns and rotates
- · Vise height: 6.8"
- · Base bolt is 4.3" and fits all PanaVise base mounts
- Weight: 1.4 lbs. One-year warranty

Part No. Description 134439 Jr. vice w/ mountable base .. \$21.95 \$19.95

JAMECO EZ Lock Pliers

- · Automatic self sizing locking pliers
- · Variable pressure for adjustable gripping force
- · Drop forge construction for strength and durability
- Padded handles for comfort

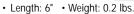
 Length: 10"
 Weight: 1.5 lbs. Part No. Description

179928 EZ lock pliers...\$9.95 \$8.95 \$7.95 \$6.95

JAMECO Retaining Ring Pliers

Internal / External

- Hi-carbon tempered steel
- Black oxide finish
- · Vinyl grip
- For 0.47" to 0.98" diameter retaining rings



Part No. Description 177551 Retaining ring pliers ... \$6.95 \$6.25 \$5.59

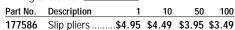
. IAMECO Groove Joint Pliers

- · Drop forged steel
- Milled jaws
- · Vinyl grips
- · Polished head · Lenath: 10"
- · Weight: 0.9 lbs.



(JAMECO Slip Joint Pliers

- · Drop forged steel
- · Heat treated
- · Polished head
- · Milled jaws
- Vinyl grips
- · Length: 8"
- · Weight: 0.6 lbs.



JAMECO Linesman Pliers

- · Drop forged steel
- · Heat treated · Milled jaws
- · Vinyl grips · Polished head
- · Length: 8"

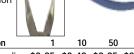


10 50 100 177594 Linesman pliers \$4.95 \$4.49 \$3.95 \$3.49

(JAMECO Long Nose Pliers

- · Drop forged steel
- · Heat treated
- · Knurled iaws
- Vinyl grips
- · Spring return action
- Length: 4.5"

· Weight: 0.2 lbs.



Part No. Description 177607 Long nose pliers \$3.95 \$3.49 \$2.95 \$2.49

(JAMECO Diagonal Pliers

- Drop forged steel
- Vinyl grips
- Spring return action
- · Polished head
- · Length: 4"
- · Weight: 0.2 lbs.



JAMECO 13 Piece 3/8" Drive Socket Set

With Holder

- Drop forged
- · Heat treated
- Metric size
- (8mm, 9mm, 10mm,

11mm, 12mm, 13mm, 14mm, 15mm, 16mm, 17mm 18mm, 19mm)

- · Fully polished and chrome plated
- · Weight: 1.2 lbs.

Description Part No. 179910 Metric set\$9.95 \$8.95 \$7.95 \$6.95

JAMECO Rotary Coax Cable Stripper

- · Includes hex key wrench
- Strips coax cable at 6mm or 8mm length
- Strip coax cables up to 7mm in diameter
- Preset v-block for RG-6, RG59, and RG-62 cables
- · Color: black
- Size: 5.0"L x 0.8"W
- · Weight: 0.2 lbs.

Part No. Product No. 181155 HT-302A\$10.95 \$9.95 \$8.95

AMECO Professional Modular Crimping Tool

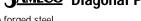
- · Spring return action
- · 6mm and 12mm stripping guide
- Crimp modular plugs without changing dies
- Crimps 10P10C, (RJ45) 8P8C, (RJ11 and RJ12) 6P6C, and (Handset) 4P4C
- · Insulated handles
- Size: 8.2"L Weight: 1.2 lbs.

Part No. Product No. 10 **181147** HT200......**\$59.95 \$53.95 \$49.95**

JAMECO 26 Piece Computer Service Toolkit

- Anti-static wrist strap
- 14-16 pin and 24-28 pin IC
- inserters · (1) DIP extrac-
- tion tool (1) PLCC surface mount
- extraction tool · 3.5 digit digital multi-meter with probes
- · Adjustable wrench · Long nose pliers
- Diagonal cutters
 - Desoldering pump · Heat tool stand
- Mini heating tool
- Rosin core solder · Inspection mirror
- Heavy duty wire stripper/cutter/ crimper (for non-insulated terminals)
- Screw driver handle with 4" extender; (2) nut drivers (1/4" and 3/16"); (3) slotted screw-drivers (1/8", 3/16", 1/4"); (3) Philips screw-drivers (No.0, No.1, No.2); (2) torque screw-drivers (T-10 and T-15)
- · Black leather case
- Size: 13.1"L x 9.8"W x 2.5"H Weight: 4.3 lbs.

Part No. Description 177463 Computer tool kit \$49.95 \$44.95 \$39.95





Part No. Description 10 50 100 179901 Diagonal pliers..\$3.95 \$3.49 \$2.95 \$2.49



JAMECO Mini-Drill and Stand

This Mini Drill (26702) is excellent for drilling through circuit boards and protoboards. The drill comes with an array of drilling and grinding (sanding) attachments. Drill stand (26711) is



designed to function like a drill press.

Part No.	Description	Wt. (lbs.)	1	10	25
26702	MS398 drill	0.8	\$29.95	\$26.95	\$23.95
26711	MS399 stand	1.8	19.95	17.95	15.95
159054	6-pc engravir	ng bits se	t 10.95	9.95	8.95

JAMECO Drill Tool Kit

This tool will polish, grind, sand, scrape, buff, cut, crave, drill and mill.

- · Drill tool has adjustable knob for speed control from 5000rpm to 20,000rpm
- · Spindle in ball bearing Lock function for easy
- bit changing
- · Includes 1mm carbide drill, 2.3mm carbide cutter, 1.8mm diamond cutter, spherical shape grinding A, conic shape grinding A, cylinderic shape grinding A/B/C, copper brush, connection rod, saw blade, 3.3t grinding, 0.6t grinding, 2.35mm bit chuck, 3.0mm bit chuck
- 18VDC @ 1A table top power supply included
- Size: (kit) 10.2"L x 7.2"W x 3.2"H
- · Weight: 4.3 lbs.

Part No.	Description	1	10	25
176065	Drill tool kit	\$69.95	\$62.95	\$56.95

9 Piece Assorted Drill Bit Kit

- Variety of sizes: .014" to .126"
- · Each kit will vary in contents of bit sizes
- · Shank diameter: .125"
- · Includes plastic case
- · Weight: 0.1 lbs.

Part No.	Description 1	10	50
131676	9-piece drill bit kit\$9.95	\$8.95	\$7.95

Spiral Step Tool Company PC Drill Bits

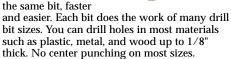
- Reconditioned carbon steel bits
- · High quality long lasting cutting edge
- · Use for drilling holes in glass PC boards
- Weight: 0.1 lbs. Shank diameter: .125"

Part	Drill					
Number	Dia.	No.	Application	1	10	100
16619	.021"	75	Miscellaneous	\$1.49	\$1.25	\$.75
16580	040"	59	Plated thru holes	1 75	1 // 0	Q

JAMECO 6 Step Drill Tool

3/16" to 1/2"

Drill multiple holes in thin material with



Made of high-speed steel. • Drill size: 3/16" to 1/2" • Weight: 0.1 lbs.

	Description	1	10	25
172401	Step drill	\$9.95	\$8.95	\$7.95

Engraving Tool with Battery Pack

- Includes diamond tip capable of engraving any surface
- Ideal for light engraving work
- Requires 4 AA batteries or wall transformer (not included see below)
- · Size: 6.5"L (with tip) · Weight: 0.3 lbs.

Part No.	Description	1	10
152506	Engraving tool	\$13.95	\$12.49
151087	AA batteries	39	.32
147707	6VDC wall transformer	5.95	5.35
159054	Replacement tip (6 pcs.)	10.95	9.95

JAMECO Metal Dial Calipers

Metric or Inches

- For accurate measurements every time • Measures outside, inside and depth
- Easy to read dial gauge
- Materials: metal
- Length: 6" (150mm) · Includes fitted plastic storage case
- Color: silver Weight: 0.7 lbs.
- Part No. Description (min. reading) 116134 Metric (.02 mm)\$24.95 \$22.49 \$19.95 116126 Inches (.001 inch)24.95 22.49 19.95

J<u>AMECO</u>' Digital Display Calipers

Metric and Inches

- · Hardened stainless steel • Display: inches to 1/1000 THS
- mm to 1/100 THS
- Resolution: 0.01mm(0.0005")
- · Instructions for making
- internal, external, depth and step measurements Auto-off after 5 minutes
 One-year warranty
- · Includes fitted case and 1.5V silver oxide
- battery (replacement battery P/N 140783, pg 82)
- Calipers measure to 6 inches/150mm Weight: 0.8 lbs. Part No. Description

127482 Digital disp. calipers \$74.95 \$69.95 \$62.95

Precision Micrometer 0"-1" Range ± .0001"

Forged steel frame precision micrometer is complete with chrome barrel and thimble for easy to read contrasting graduation. Hardened, precision ground measur-



ing surface with positive spindle lock holds measurements. Accurate to .0001". Quick and easy zero adjustment with spanner wrench.

· Length: 5.4" · Weight: 0.7 lbs.

Part No. Description 169543 Precision micrometer \$17.95 \$15.95 \$14.49

JAMECO Pocket Swivel **Deburring Tool**

One Tool for all Shapes and Sizes

- Aluminum handle
- · Heat treated alloy steel blade
- · Pen type of pocket convenience
- Swivel deburring tip rotates to match burred surface with only slight pressure
- Size: 5.5"L Weight: 0.1 lbs.

Part No.	Description 1	10	25
172902	Deburring tool\$4.95	\$4.49	\$3.95

JAMECO 3 Pc. Extractor Tool Set

1/16" to 17/64" Dia.

 Used for extracting screws and bolts

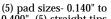
152506

- Drill appropriate size hole in stub and extractor then turn counterclockwise
- Extractor sizes: #1 (1/16"-1/8"); #2 (3/32"-11/64"); #3 (1/8"-17/64") • Weight: 0.1 lbs.

Part No. Description 171192 3 pc. extractor tool set \$3.95 \$3.49 \$2.95

ESD Vac Tweezer

Pick and place small parts of all kinds, glass slides, coins, optics, SMDs, film or any other small items. Contains:



- 0.400", (5) straight tips, (2) 45° angle tips
- Size: 2.9"L x 0.6"W
 Weight: 0.1 lbs.
- · One-year warranty

Part No. Description Vacuum pick & place kit \$29.95 \$26.95 88268

Stainless Steel Precision Tweezer

- · Acid-resistant
- · Non-magnetic
- · Size: 6" long
- · Weight: 0.1 lbs.

Part No. Description 10 Straight tweezer......\$2.95 \$2.49 \$1.95

4 Piece Steel Tweezer Set

- 4 different style stainless steel tweezers, including one
- self-locking Ideal for picking up small
- components in hard to reach places as well as component assembly on PC prototype boards Weight: 0.1 lbs.

Part No. Description 10735 4 piece tweezer set\$5.95 \$4.95 \$3.95

JAMECO 4-Piece Conductive SMD Tweezer Set

4 types of tweezers: fine point, flat head for 4mm SMD chip device, flat head for 8mm SMD chip device,

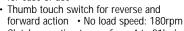
sharp angled tip

 Each is 4.5" long · Weight: 0.1 lbs.

Part No. Description 172638 4-piece tweezer set\$9.95 \$8.95 \$7.95

J<u>AMECO</u>® Cordless Screwdriver

- · 3.6V rechargeable battery
- · Adjustable handle can be used folded or unfolded for ease of use



- · Clutch operating torque from 4 to 21kg/cm
- · Note: charge overnight prior to usage
- Includes 6VDC @ 300mA power supply and screwdriver bit (Standard and Philips)
- Size: 10.5"L x 1.5" Dia.
 Weight: 1.6 lbs. Part No. Description

176680 Screwdriver\$39.95 \$35.95





10 Piece Hex Key Wrench Sets

• 72469 includes 1.5, 2, 2.5, 3, 4, 5, 5.5, 6, 8, and 10mm wrenches



• 72477 includes 1/16, 5/64, 3/32, 1/8, 5/32, 3/16, 7/32, 1/4, 5/16 and 3/8" wrenches

Part No.	Description	Wt. (lbs.)	1	10
72469	Metric hex key	0.6	\$3.95	\$3.49
72477	SAE hex key	0.5	3.95	3.49

JAMECO 8-Piece Fold-Up **Torx Keyset**

• 3.7" long handle

• Torx bit: T9, T10, T15, T20, T25, T27, T30, T40

• Size: 3.7"L x 1.2"W

· Weight: 0.4 lbs.



10 Piece Open-end/Box Wrench Set

· Includes 10 wrenches w/ the following sizes: (3/8, 7/16)(11/32, 3/8)(5/16, 11/32)



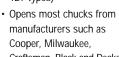
(9/32, 5/6) (1/4, 9/32) (7/32, 15/64) (15/64, 1/4) (13/64, 7/32)

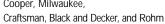
(3/16, 5/32) (5/32, 3/16) • Material: alloy steel • Weight: 0.3 lbs.

Part No. Product No.Description 10 pc. wrench set\$8.95 \$7.95 **99602** WS608

JAMECO° 4-Way Master Key **Chuck Tool**

· Opens a variety of chucks (P/N 172911 opens 86 types); (P/N 172929 opens 127 types)





172911: • Chuck size: 1/4" to 3/8" • Wt.: 0.3 lbs.

172929: • Chuck size: 1/2" to 3/4" • Wt.: 0.6 lbs. Part No. Description 10 **172911** Opens 86 chuck.......\$7.95 \$6.95 172929 Opens 127 chucks......9.95 8.95

Pin VISE w/ Reversible Chuck Nose

· Knurled steel swivel handle

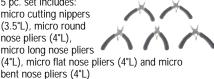
· Solid locking chuck noses

 Adjustable chuck nose from .00" to .05" and .05" to .08"

· Length: 3.5" · Weight: 0.1 lbs. Part No. Description 10 173323 Pin vise......\$6.95 \$5.95 \$5.35

JAMECO Precision 5 Piece Stainless Steel Plier Set

• 5 pc. set includes: micro cutting nippers (3.5"L), micro round nose pliers (4"L), micro long nose pliers



· Spring return · Insulated handles

Part No.	Description	Wt. (lbs)	1	10	25
73120	5 piece set	0.6 \$16. 9	95	\$14.95 \$13.	49

JAMECO Flat and Half **Round Long Nose Pliers**

Stainless steel
 Spring return

· Durable rubber handles

• 5.3" length w/ 1.4" plier nose

 Knurl jaws · Weight: 0.2 lbs.

Part No. Description 1 50 10 100 35473 Flat long nose.....\$4.95 \$4.49 \$3.95 \$3.49 35490 Half round.......4.95 4.49 3.95 3.49

Xcelite Shearcutter/Plier Tool Set

· Improved handle grip for control and comfort

Non-glare black finish carbon steel

Size (plier): 5.6"L

Size (shearcutter): 5.2"L
 Weight: 0.4 lbs.

Part No. Description 1 10 152055 Cutter/plier set (S2K) \$14.95 \$13.49 \$11.95

Xcelite Pliers



 Spring returns
 Weight: 0.2 lbs. 146712: Micro series wire cutter - flush

146739: Diag. wire cutter - semi-flush 146721: Long needle nose - flat

Part No.	Product No.	1	10	25
146712	170M	\$5.95	\$5.35	\$4.79
146739	MS54V	13.95	12.49	11.25
146721	MN7776V	15.95	14.49	12.95

MADE IN

Xcelite 6 Piece Precision **ESD Screwdriver Set**

Swivel caps and comfort grip handles provide optimum control.

Cushion grip

4 flat points: 0.1"Dia. x 6.5"L

 2 Phillips: No. 0 and 00 - 0.1"Dia. x 6.5"L

· Weight: 0.5 lbs.

Part No. Product No. XP600.....\$21.95 \$19.95

JAMECO* Pocket Screwdriver

Phillips/Blade

· Pocket screwdriver with Phillips and flat head • Pen clip for pocket storage • Size: 6"L Part No. Description 127271 Pocket screwdriver.......\$.99 \$.79 \$.65

8 Piece Electrician Screwdriver Set

· Insulated handle and blade protection-up to 1000V

 Four flat points: 0.24"Dia. x 9.91"L; 0.2"Dia. x 8.92"L;

0.16"Dia. x 7.54"L; 0.1"Dia. x 6.10"L

• One flat point with Buz light: 0.16"Dia. x 7.4"L • Three Phillips: No. 0, 0.1"Dia. x 6.10"L;

No.1, 0.16"Dia. x 7.54"L; No.2, 0.24"Dia. x 9.91"L • Material: chrome-vanadium • Weight: 1.2 lbs.

Part No. Product No. Description 99688 SD315B 8 pc. screwdriver set \$8.95 \$7.95

6 Piece Electronic Screwdriver Set

 Three slotted points: 0.09"Dia. x 6.65"L; 0.12"Dia. x 6.64"L; 0.16"Dia. x 9.61"L



Three Phillips: No.0, 0.12"Dia. x 6.64"L; No.1, 0.16"Dia. x 9.61"L; No.2, 0.09"Dia. x 6.65"L

· Weight: 0.4 lbs.

Part No. Description 99451 6 pc. screwdriver set......\$7.95 \$6.95 \$5.95

6 Piece Screwdriver and Pliers Set

 One micro cutting nipper

· One micro flat nose pliers

· Two flat points:

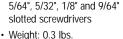
0.12"Dia. x 9.61"L; 0.09"Dia. x 7.64"L

Two Phillips: No.0, 0.12"Dia. x 9.61"L; No.2, 0.09"Dia. x 7.64"L • Weight: 0.5 lbs.

Part No. Description 99565 Screwdriver/plier set.....\$11.49 \$10.49 \$9.49

6 Piece Precision Screwdriver Sets

· 34041 includes 3/64", 1/16", 5/64", 5/32", 1/8" and 9/64" slotted screwdrivers



34059 includes 3/64"#0,

1/16"#0, 5/64"#0, 3/32"#0, 1/8"#1 and 9/64"#1 Phillips screwdrivers • Weight: 0.3 lbs. Part No. Description

34041 Slotted screwdriver set\$2.95 \$2.49 \$2.25 34059 Phillips screwdriver set2.95 2.49 1.95

7 Piece Hex Driver Tool Set

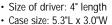
 Includes one of each of the following: (unit: mm) 3, 3.5, 4, 4.5, 5, 5.5 and 6mm

• Size of drivers: 6.3"L • Weight: 0.5 lbs.

Part No. Description 148929 Hex nut driver tool set\$12.95 \$11.49

5 Piece Precision Nut Driver Set

· Includes one each of the following nutdrivers: 1/8", 9/64" 5/32", 11/64", 3/16"



· Weight: 0.3 lbs.

34067 Prec. nut driver set.....\$1.95 \$1.75 \$1.49



159134

- A BRIDE

133161

JAMECO Diagonal Wire Cutter

- Cuts component wire up to 1 2mm thick
- Stainless steel
- · Durable rubber handles
- · Jaws are designed for flush cutting
- 4.3"L x 2.1"W with 0.5" cutting blade
- · Weight: 0.1 lbs.

Part No.	Description	1	10	50	100
35481	Wire cutter	\$4.95	\$4.49	\$3.95	\$3.49

Diagonal Wire Cutter

- Cuts component wire up to 1.2mm thick and .08mm fine wire
- Insulated handles
- Jaws are designed for flush cutting
- 5.0"L x 1.8"W with 0.5" cutting blade
- · Weight: 0.2 lbs.

Part No. Product No. 161411 Wire cutter.....\$6.95



2-in-1 Wire Stripper and Cutter

- Cutter with safety clip
- · Able to strip wire up to 3/4" in length
- Strips 26-14 gauge wires
- Size: 5.2"L x 3.0"W
- · Weight: 0.2 lbs. Part No. Description

148911 2-in-1 wire stripper/cutter\$9.95 \$8.95

Terminal Wire Crimping Tool

- Crimps solderless terminals: 22-18 AWG red. 16-14 AWG blue and 12-10 AWG yellow
- Size: 9.0"L x 2.0"W · Weight: 0.8 lbs
- Part No. Product No. 10 72995 HT303..... .\$15.95 \$14.49 \$12.95

Plastic Modular Crimping Tool

- · Crimps 4P, 6P and 8P plugs (4P2C, 4P4C, 6P2C, 6P4C, 6P6C, 8P2C, 8P4C,
 - 8P6C, 8P8C)
- Size: 8.0"L Weight: 0.5 lbs.

Part No.	Description	1	10	25
116097	RJ11 crimping tool	.\$14.95	\$13.49	\$11.95

JAMECO Trimmer Potentiometer **Adjustment Pocket Tool**

 Glass filled body Stainless steel blade Color: black · Weight: 0.02 lbs. • Size: 5.2"L Part No. Description 1 10

.\$1.19 \$.99 \$.89 153314 Trimmer tool..... **IAMECO** Professional Tool Case

- · Aluminum framed
- · Padded interior and adjustable dividers (6 sections)
- · Detachable tool organizer for easy access · Weight: 8.1 lbs.
- · Color: black with aluminum trimmings
- Size: 18"L x 13"W x 6"H

Part No. Description 149016 Professional tool case\$39.95 \$35.95

Paladin Tools® Impact Punch-Down Tool

Conforms to AT&T performance specifi-124142 cation. Reversible clip-in blade. adjustable springloaded impact mechanism 124151 and spare storage

blade in the handle. · One-vear warranty

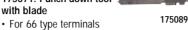
124142: For 66-type bifurcated terminals

 Size: 7.0"L x 1.4"W x 1.1"H • Weight: 0.4 lbs. **124151:** Blade for 110-type terminals • Wt.: 0.1 lbs. Part No. Description 10 124142 Tool w/ blade\$54.95 \$49.95 \$44.95 124151 Punch-down 110 blade..15.95 14.49 12.95

, JAMECO Impact Punch Down Tool

- Reversible clip in blade
- Adjustable (HÍ-LO) spring loaded impact 175071 mechanism
- Storage bin on handle for spare blade





- Size: 5.2"L x 1.5"W x 1.0"H
- · Weight: 0.4 lbs.

175089: Punch down blade

 Blade for 110 type terminals · Weight: 0.1 lbs.

= :		-	
Part No. Description	1	10	25
175071 Tool w/ 66 blade\$34.9	95	\$31.49	\$27.95
175089 Punch down blade 110 9.9	95	8.95	7.95

Automatic Center Punch Tool Adjustable

- Precision instrument
- · Alloy steel point
- Knurled steel body
- · Size: 5.0"L x 0.5"Dia.
- Weight: 0.2 lbs.
- Part No. Description 10 50 160282 Center punch tool \$5.95 \$5.49 \$4.95 \$4.49

IAMECO T-Handle Reamer Tool

Excellent for aluminum chasis work

- For enlarging starter holes on panel mount components from 1/8" to 1/2" diameter
- T-handle for easy rotation of tool
- Size: (handle) 3.3"L; (tool) 5.3"L Weight: 0.2 lbs. Description 10 Part No.

151749 Reamer tool.....\$7.95 \$6.95 \$5.95

(I) Nibbling Tool

- · Perfect for cutting and trimming, or notching sheet metal up to 18 AWG
- · Time-saver when working on chassis, printed circuit boards and prototype models
- Min. .375" hole required Size: 7.8"L

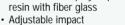
18809: • Weight: 0.4 lbs 29330: • Weight: 0.1 lbs. Part No. Prod. No. Description 1 10 18809 HT204 Nibbling tool\$8.95 \$7.95 \$6.95 29330 HT204B Replacement bit 3.95 3.49 2.95

(H) Punch Down Impact Tool

With #66 Blade

 For seating wire into terminal blocks or cut off wire end after terminated

Frame made of polyacepal resin with fiber glass



pressure control

 Storage on handle for spare blade Compatible with P/N 133161 (#110 blade)

• Size: 6.8"L x 1.2"W x 1.1"H • Weight: 0.4 lbs.

Note: not compatible w/ Harris Dracon & Paladin blades Part No. Product No. 10 159134 HT314.....\$29.95 \$26.95 \$23.95 133161 HT14B (#110 blade) ..7.95

(H) Economy Non-Impact **Punch-Down Tool**

- Terminates 66-type bifurcated terminals
- · Reversible blade one end terminates and the other terminates and cuts the wire



159118

159185

- · Handle made of polyacepal resin and fiberglass
- Handle size: 5.6"L x 1.2"W x 1.1"H
 Weight: 0.1 lbs. Part No. Prod. No. Description 1 133153 HT334 Tool w/ blade \$16.95 \$14.95 \$13.95 133161 HT14B #110 blade 7.95 6.95 6.25

(II) Rotary Coax Cable Strippers

2 and 3 Blade

- Includes hex key wrench for adjusting blade
- · Weight: 0.2 lbs. 159118:

Two settings RG58/59/62

- · For cable sizes 4-10mm
- Size: 4.2"L x 1.3"W
- · Color: black

159185

Four settings RG58/59/62/174 For cable sizes 4-12mm

• Size: 3.9"L x 0.7"W • Color: gray

Part No. Product No. 10 25 \$7 95 159118 HT312B (3 blade)\$9.95 \$8.95 159185 HT332D (2 blade) 10.95 9.95

(F) BNC Connector Removal Tools

- · For deep chasis removal
- · Allows access to hard to



(F) PLCC Surface Mount and **DIP IC Extractors**

 Size: 4.0"L x 2.0"W (both) 16838: DIP IC extraction tool

· Weight: 0.04 lbs. 16766: PLCC IC extraction tool



18809

vvcigii	. 0.00 103.			
Part No.	Product No.	1	10	10
6838	HT103A	\$1.39	\$1.19	\$1.0
6766*	HT103B	4.49	3.95	3.4

16838

Ratcheted Modular Crimping Tools

- Insulated grip
- Ratcheted type
- · Metal material

159329: • 7.5"L

· Crimps RJ11/12 (6P6C) and handset (4P4C)

· Weight: 0.7 lbs.

159311: • 7.5"L

 Crimps RJ45 (8P8C) and RJ11/12 (6P6C)

· Weight: 0.7 lbs. 159337: • 8.0"L

· Crimps RJ45 (8P8C) and RJ11/12 (6P6C) and handset (4P4C)

· Weight: 1.2 lbs.



Metal Modular Crimping Tools

- · Cable stripper and wire cutter • Size: 8.0"L
- · Weight: 1.8 lbs.
- 73091: Crimps 4P and 6P plugs (4P2C, 4P4C, 6P2C, 6P4C, 6P6C, RJ11)

• 114526: Crimps 6P and 8P plugs (6P2C, 6P4C, 6P6C, RJ11, 8P2C, 8P4C, 8P6C, 8P8C)

Part No. Description 73091 RJ11(4P4C)/(6P6C)\$19.95 \$17.95 \$15.95 114526 RJ11(6P6C)/RJ45(8P8C) 19.95 17.95 15.95

Modular Crimping Tool Set

- 8" metal modular crimping tool
- · Cuts, strips and crimps
- · Crimps 4P, 6P and 8P plugs
- Includes 90 modular plugs: 40 4P4C modular plugs (616), 30 6P6C modular plugs (623), 20 8P8C modular plugs (641)
- · Carrying case: blue hard plastic, 8.0"L x 10.5"W x 2.0"H

· Weight: 2.1 lbs.



RG58U/59U Coax Tool Set

- · Heavy duty 9" crimping tool
- · Heavy duty 6.5" cutter
- · Coaxial cable stripper
- · Includes sturdy locking case

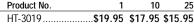
· Weight: 2.3 lbs.

Part No. Product No. Description **148849** HT3010 3 pieces......\$39.95 \$35.95 \$31.95

Ratcheted BNC Crimping Tool

- · Crimps RG58, RG59, RG62, RG174 and fiber optic
- · All steel construction
- · Size: 8.5"L x 2.5"W
- · Weight: 1.1 lbs.

Product No. 114534



D-Sub Crimping Tool

20-28 AWG

- · Crimps D-sub pins and sockets
- For use with P/Ns 43377, 43369 (pg 65) and 100765 (pg 61)
- Size: 7.0"L x 4.0"W
- · Weight: 0.4 lbs

159329

159337

Part No.	Product No. 1	10	25
159265	HT213 \$9.95	\$8.95	\$7.95

Non-Insulated Terminal D-Sub Crimping Tool

14-26 AWG

- · Heavy-duty metal crimping tool w/ cutter
- For computer pins and sockets, D-sub 26-28 AWG wire
- For butt-insulated connectors, 22-26 AWG wire
- For telephone spade lugs, 22-26 AWG wire
- For non-insulated connectors, 20-22 AWG wire
- For non-insulated connectors, 14-18 AWG wire
- Red insulated handles Coiled spring return
- Size: 7.3"L x 1.5"W · Weight: 0.5 lbs. Part No. Product No. 10

100 HT202A.....**\$8.49** \$7.49 \$6.95 \$6.29

Hex Crimping Tool RG58/59/62/142

· Crimps BNC connectors

- to RG58/59/62/142
- · Crimps center pin
- · Adjustable grip opening
- · Insulated grip handles
- Size: 9.0"L x 2.0"W
- · Weight: 1.5 lbs.

Product No. Part No.

159302 HT106D\$14.95 \$13.49 \$11.95

IDC Crimping Tool

- Crimping distance: 27.5mm to 6mm (with attachment)
- Cushioned red handles
- Crimp insulation displacement connectors
- Use for IDC socket connectors (pg 61)
- Size: 9.2"L x 3.0"W Weight: 1.1 lbs.

Part No. Product No. 73251★ HT214\$11.95 \$10.95 \$9.95

Universal Stripping Tool

Strips Round and Irregular **Shaped Cable**

- · Strips 18-22 AWG wires
- · For STP/UTP, computer cable, SPT-1/SPT-2, flat wire: 2P/4P/6P/8P
- Size: 4.5"L x 2.0"W
- · Weight: 0.1 lbs.

Part No. Product No. 10 25 HT501.....**\$5.95 \$5.35**

Metal Deburring Tool

Large Handle

- · Enlarges hole up to 2.56mm (0.1") in diameter
- Size: 6"L
- · Weight: 0.1 lbs.

Part No. Product No. **159193** HT111\$2.95

Wire Cutter / Stripper

24 AWG Stripper

- · Strips and cuts wire up to 24 AWG
- · Insulated grips
- Spring loaded for easy use Cutter angled @ 45 degrees
- for use in tight places
- Size: 6.6"L x 3.0"W Weight: 0.1 lbs

Part No.	Product No.	1	10	2
159273	HT1091	\$3.95	\$3.49	\$2.9

Wire Cutters / Strippers

- · Insulated handles
- Spring return
- Tempered steel cutting edge
- Adjustment for wire gauges
- Size: 5.0"L x 3.0"W
- Weight: 0.2 lbs.
- One-year warranty 183003: for 12-24 AWG wire

78991 **78991**: for 10-30 AWG wire Part No. Product No. 1 10 JE107.....**\$2.95** \$2.49 \$2.25 183003 78991 HT108**2.95** 2.49

Wire Stripper Tool

22-30 AWG

- · Wire stripper, cutter, steel wire cutter, and wire loop Scale: AWG and mm
- Strips and cuts wires from 20-30 AWG
- Size: 6.6"L x 2.0"W
- · Weight: 0.3 lbs.

Part No. Product No. HT5023..... .\$7.95 \$6.95 \$6.25 159290

7-in-1 Hand Tools

- Wire stripper, wire cutter, steel wire cutter, pliers and wire loop
- Scale: mm and inch
- · Solderless connector crimper
- · Closed lock · Crimping tool
- Size: 6.6"L x 3.0"W
- Weight: 0.4 lbs

				_	
Part No.	Product No	. Description	1	10	25
18796	HT104	10-18AWG	\$3.95	\$3.49	\$2.95
127861	HT1042	16-26AWG	4.95	4.49	3.95
127870	HT10//3	22-3UV/VC	4 95	1 10	3 95

Cable Tie Tool

Tightens & Cuts

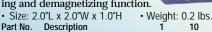
- All steel construction
- · Tightening cable ties up to 2.3mm (.09") thickness
- · Separate cutting handle
- · Size: 6.3"L x 3.6"W
- · Weight: 0.5 lbs. Part No. Product No.

HT2081**\$6.95 \$6.25 \$5.59** 159281

JAMECO Magnetizer / **Demagnetizer Tool**

Perfect for Small Tools

Convenient pocket size tool, housed in strong plastic case. Ideal for general magnetizing and demagnetizing small hand tools. Open slots for magnetizing and demagnetizing function.



175960 Magnetizer tool......\$4.95 \$4.49 \$3.95



Black Desk Lamps

- · Ventilated metal shade
- · Double shade reduces glare
- · Lampholder switch
- · Max. bulb size 60W (not included)
- 110V input
- · Rotating on-off switch



159960

P/N 159951: Lamp

• Base size: 5.5" diameter • Height: 16.0" • Wt: 2.5 lbs. P/N 159960: Lamp w/ organizer (for pens & paper clips)

ı	• Base size: 7.1 H x 4.2 W • Height:	15.0	• ٧٧١:	2.0 105
	Part No. Description	1	10	100
	159951 Desk lamp\$4	1.95	\$4.49	\$3.49
	159960 Lamp w/ organizer5	5.95	4.95	3.95
1				

Heavy Duty 3X Magnifying Lamps

- · 45" extension arm
- · Supplied with 22 watt Circline tube
- · New wire clip design permits easy installation



· Power requirement: 110VAC/60Hz

 3X magnification · Weight: 7.3 lbs.

Part No.	Description	1	10	25
100829	Black lamp	\$62.95	\$56.95	\$49.95
	White lamp			

Standard Adjustable 3X Magnifying Lamp

- · 4" Diameter lens
- · Maneuverable 30" arm extension
- · Lamp tilts or turns in any direction
- · Uses 60W incandescent bulb (not included)
- 3X magnification Wt.: 2.9 lbs.
- Power requirement: 110VAC/60Hz

Part No.	Description	1	10	25
22710	Magnifying lamp	.\$29.95	\$26.95	\$23.95

3X Magnifier with Adjustable Stand

- Heavy duty steel base
- Size: 15"L (full stand) x 4"Dia. (base)

Part No.	Description	Wt. (lbs.)	1	10
148881	Magnifier	2.5	\$12.95	\$11.49

General Purpose Illuminated 3X Magnifier

- 3X power 75mm diameter lens
- · Great for magnifying fine print
- · Light requires 2 AA batteries (not included) • Weight: 0.4 lbs.
- Size: 7.5"L x 3.75"Dia.

Part No.	Description	1	10	25
149542	Illuminated magnifier	\$4.95	\$4.49	\$3.95

Information at Your Fingertips

Log on to our web site for specials, technical tips and expanded product information



1,000,000 Candle Power Spotlight

1-Mile Beam

- Built-in 6V rechargeable battery
- Computer designed parabolic lens
- Provides up to 25 minutes of continuous operation
- Powerful halogen bulb provides brilliant beam • Size: 6.2" diameter housing across 1 mile
- Includes wall adapter (7.5VDC@400mA with 2.1mm x 5.5mm center positive) and auto adapter for charging battery · Weight: 4.7 lbs.

Part No. Description 173315 Cordless spotlight....\$29.95 \$26.95 \$23.95

AA Flashlight

- · Black hard plastic body
- · Requires (2) AA batteries
- Size: 6.0"L x 0.9" D Wt: 0.1 lbs

Part No.	Description	1	10	100
159812	GE flashlight	.\$2.95	\$2.49	\$.99
151087	AA batteries	39	.32	.19

8 Piece Steel File Set

- (1) 0.15"Dia. x 5.65"L (1) 0.13"Dia. x 5.65"L (4) 0.22"Dia. x 5.65"L (1) 0.12"Dia. x 5.65"L
- (1) 0.11"Dia. x 5.65"L · Material: tool steel · Weight: 0.2 lbs Product No. Description 100360 FS108F 8 piece file set\$8.95 \$7.95

4 Piece Alignment Tool Set

- · Includes 4 plastic alignment tools with multiple functions
- Flat screwdriver function & hex • Weight: 0.1 lbs.

Part No. Product No. Description 4 piece tool set \$3.95 \$3.49 \$2.95 **99637** ATS606

Deluxe Precision Knife Set

- Three different knife handles - fine work, medium and heavy duty power grip
- 13 different types of blades included • Weight: 0.4 lbs.
- Size: 6.3"L x 2.8"W x 1.4"H
- Part No. Description 13 blade knife set. .\$7.95 \$6.95 \$5.95

5" Steel Hemostats

- · Grade 410 A.I.S.I. stainless steel
- 115107 Three locking positions
- Available with straight or curved tip Weight: 0.1 lbs. Part No. Product No. Description 5" straight......\$3.95 \$3.49 \$2.95 **115107** HEMO1 5" curved......3.95 3.49 2.49 **115115** HEMO2

JAMECO Electricians Scissors Tool

Two notches for stripping 19 and 24 AWG

- · Stainless steel
- Sharp edge inside blade for cutting
- Serrated edge outside blade for stripping
- Size: 5.2"L Weight: 0.2 lbs.

Part No.	Description	1	10	25
175978	Electricians scissors.	\$9.95	\$8.95	\$7.95

Motion Detector Switch

- · Replaces standard wall switch
- · Mini spout load: 80W/120V
- Maxi spout load: 1000W/120V
- · Auto off switch
- · Sensitivity and timer adjustment (5-25 minutes)
- Size: 5.0"L x 5.0"W x 1.4"H · Weight: 0.9 lbs.

Part No. Description 122892 Motion detector switch .. \$10.95 \$9.95 \$8.95

JAMECOIC Pin Straightener

Straighten bent pins safely and easily with Jameco's IC pin straightener.

- · Includes a ground terminal
- Straightens 8/14/16/18/20/ 24/28/40/42-pin ICs
- · Color/materials: black plastic
- Size: 3.3"L x 1.5"W x 0.4"H Weight: 0.1 lbs.

Part No.	Description 1	10	100
99362	IC straightener\$5.95	\$5.35	\$4.95

OK Strip-Wrap-Unwrap Tools

- · Strips, wraps, unwraps
- Tool tip made of 34577 tempered steel
- Use with 30 AWG wire on .025" square posts
- No solder necessary (see pg 68 for wire)
- Spring steel cutter 4.5" long Weight: 0.04 lbs.

34585: • Wrap 1 to 2 turns of insulated portion of wire for secure connections · Modified tool

Part No.	Product No.	1	10	25
34577	WSU30	.\$26.95	\$24.95	\$22.49
34585	WSU30M	27.95	24.95	22.95

Resistor Lead Forming Tools

106884

- · Watt size indicates appropriate package size
- · Bends lead length
- in .05" increments • Excellent for capacitors • Weight: 0.05 lbs.
- 106884: 1/4W: 0.4"-1.5"; 1/2W: 0.5"-1.5"; 5.4"L x 1.5"W

133938: 1W: 0.8"-1.4": 2W: 0.9"-1.9": 5.4"L x 1.8"W Part No. Product No. Description 106884 RLF801 1/4-1/2W....**\$2.95 \$2.49**

133938 RLF802 1-2W**3.95** 3.49 2.95

JAMECO Glue Gun and Sticks

- · Will adhere to PCBs, cardboard. wires and metal Silicon nozzle
- · Electronic
- heating system UL/CSA listed
- · Automatic trigger action
- · Utilizes long glue sticks (100mm 6/pk)
- Size: 7.3"L x 6.3"W Weight: 0.8 lbs. 176292: 11.2mm Dia. (10/pk)











Telemaster Crimp/Cut/Strip Tool

For RJ11 (6P) and RJ45 (8P) Modular Plugs

 Repeatable crimp action for consistent high quality connectors



161200

161234

· Includes cut and strip blade

• Size: 6.0"L x 2.0"W • Wt: 0.8 lbs. Part No. Product No. Description

161091 ID30-496 Telemaster tool....\$44.95 \$39.95

Standard T5 & T6 Wire Strippers

Quality built strippers feature looping holes, built-in wire cutters, cushioned plastic grips and precision knife-type blades for an accurate easy strip every time.

 Size: 6.0"L x 2.0"W · Weight: 0.3 lbs.

P/N 161200: T-5 • 10-18 AWG solid · Color: vellow P/N 161218: T-6 •16-26 AWG stranded Color: red Part No. Product No. Description

161200 ID45-120 T-5 10-18 AWG ...\$11.95 \$10.95 **161218** ID45-121 T-6 16-26 AWG **11.95 10.95**

Premium T5 & T6 Wire Strippers

Precision form ground knife-type blades. Easy to see painted wire gauge markings. Versatile plier-type nose.

· Cushion grips

• Size: 6.0"L x 2.0"W

· Weight: 0.3 lbs.

161226: T-5 · 10-18 AWG solid

· Color: yellow

161234: T-6 • 16-26 AWG stranded • Color: red Part No. Product No. Description

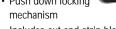
161226

161226 ID45-215 T-5 10-18 AWG ...\$14.95 \$13.49 **161234** ID45-216 T-6 16-26 AWG**14.95**

JAMECO Crimp / Cut / Strip Tool For RJ11 (6P) and RJ45 (8P) Modular Plugs

· Repeatable crimp action

for consistent high quality connectors Push down locking



· Includes cut and strip blade

• Size: 8.0"L x 2.0"W · Weight: 0.8 lbs.

Part No. Product No. Description 174684 TTK071 Crimp tool. \$29.95 \$26.95

JAMECO Auto Wire Stripper Tool

· Automatic wire stripper

 Strips 8, 10, 12, 14-16, 18-20, 22 AWG wires

· Spring load grip

· Includes wire stopper for desired strip length

· Size: 7.0"L x 2.5"W

· Weight: 0.8 lbs.

10 175097 Auto wire stripper ... \$14.95 \$13.49 \$11.95

Ratchet Telemaster Tool

For RJ11 (6P) and RJ45 (8P) Modular Plugs

 Repeatable crimp action for consistent high quality connectors



Includes cut and strip blade

Size: 6.0"L x 2.0"W • Weight: 1.2 lbs

Part No. Product No. Description 161103 ID30-696 Ratchet tool.......\$54.95 \$49.95

Telecom Termination Kit

For RJ45/11 2, 4, 6 & 8 Position Combination

Kit includes:

· Telemaster for RJ11/45 modular plugs

· 15 each 4 and 6 position RJ11 stranded modular plugs

15 each 8 position RJ45 stranded modular plugs

Size: 11.0"Lx 8.0"W x 2.0"D • Weight: 2.0 lbs.

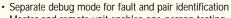
Part No. Product No. Description 161146 ID33-704 Termination kit\$69.95 \$62.95

LinkMaster™ Tester

· Quickly and reliably tests twisted pair cable

· Checks continuity and configuration

· Tests for open circuits, shorts, miswires, reversals and split pairs



· Master and remote unit enables one-person testing Remote unit has a T568A/B wiring chart

Tests all common data wiring configurations

· Shield detection feature tests cable shield integrity

· Tests patch cords over eighteen inches in length

Six-volt battery installed in main unit

· LED illuminates when battery replacement is necessary

Size: 3.3"L x 2.0"D x 1.3"H • Weight: 1.2 lbs.

Part No. Product No. Description **164902** ID62-200 LinkMaster™......\$99.95 \$89.95

JAMECO Ratchet Crimp Tool

For RJ-11 (6P) and RJ45 (8P) Modular Plugs

· Repeatable crimp action for consistent high quality connectors

Includes cut and





Size: 8.5"L x 2.2"W • Weight: 1.2 lbs.

Part No. Product No. Description 174676 TTK070 Ratchet tool.

Crimping Tool Kit with Stripper For RJ11 (4 and 6 position) and RJ45 (8 position)

Spring loaded modular crimping tool for RJ11 and RJ45

Wire stripper for solid and stranded Cat. 5 wires

15 each of RJ11 (4 and 6 position) stranded modular plugs

• 15 each RJ45 (8 position) solid modular plugs

15 pieces (3 piece each of black, white, gray, red, blue) rubber boots for modular plugs

Includes black plastic case

• Size: (case) 11.0"L x 7.8"W x 2.5"Thick • Wt.: 2.2 lbs.

Part No. Product No. Description 175484 TTK220 Crimping tool kit....\$59.95 \$53.95

JAMECO Electrical Tester Set

· Wire stripper and cutter (10-24 AWG)

Heavy duty circuit tester (90-300 VAC/DC)



• 10 pcs. yellow wire nuts (14-22 AWG)

10 pcs. red wire nuts (10-18 AWG)

 Durable plastic case · Weight: 0.9 lbs.

• Size: 12.0"L x 6.5"W x 1.5"H

Description 10 Part No. Tool and tester set\$2.95 \$2.65 \$2.35 153197

8 Piece Insertion and **Extraction Tool Kit**

Six IC insertion tools for: 8, 14/16, 18/20, 22, 24/28 and 32/40-pin ICs

· Universal extraction tool with insulated handle

· Black vinyl carrying case with zipper

• Size: 7.8"L x 5.0"W x 1.5"H • Weight: 0.6 lbs. Part No. Description

104707 Insertion/extraction kit \$17.95 \$15.95 \$13.95

15 Piece Computer Service Tool Kit

· Anti-static wrist strap

· 8 and 20-pin IC inserters

IC extractor

· Screwdriver handle with 3.75" extender and adapters:

(3) Phillips: #0, #1 #2; (3) slotted: 1/8", 3/16", 1/4"; (2) nut driver: 3/16", 1/4"; (2) torque: T-10, T-15

· (2) tweezers: straight, angled

Probe (logic & voltage ±)
 Black vinyl carrying case

• Size: 9.0"L x 5.8"W x 1.3"H • Weight: 1.9 lbs.

Part No. Description 10 Computer tool kit.....\$34.95 \$31.49 \$27.95 14171

20 Piece SAE Computer Tool Kit

· 30W soldering iron

· 6' solder

• 8" wire cutter/stripper

• 5" needle nose pliers

· 6" adjustable wrench

• (3) slotted screwdrivers (1/4", 3/16" and 1/8")

· (3) phillips screwdrivers (#0, #1 and #2)

· (2) nut drivers (1/4" & 3/16")

Chip extractor

Reversible TORX screwdriver (T10/T15)

· Tweezers/pincher · Clamping tweezers

• 3-pronged parts retriever • Spare parts tube

• Flashlight with battery • Heavy duty molded case • Size: 11.9"L x 9.2"W x 2.0"H • Weight: 3.5 lbs.

Part No. Description 1 10 170966 Computer tool kit \$24.95 \$22.49 \$19.95



Computer Service Tool Kits

- (2) Slotted screw-drivers: 1/8", 3/16"
- (2) Phillips screw-drivers: #0, #1
- (2) Nut driver: 3/16", 1/4" (1) Tweezers
- (1) 3-claw parts holder (1) 14-40 pin IC extractor
- Black vinyl carrying case

167206: 11 Piece Tool Kit

- (1) T-15 torque screw
- (1) Clear components tube holder
- Size: 8.5"L x 5.9"W x 1.3"H
- · Weight: 1.1 lbs.

14189: 12 Piece Tool Kit

- (1) Reversible handle with (1) T10/T15 torque bit
- (1) 14-16 pin IC inserter/straightener
- Size: 9.0"L x 5.8"W x 1.3"H
- · Weight: 1.2 lbs.

Part No.	Description	1	10	25
167206	11 piece tool kit	\$12.95	\$11.49	\$9.95
1/110	12 niece tool kit	1/ 05	12 //0	11 05

JAMECO 26 Piece Tool Kit

Excellent Kit for Electronics Repair and Maintenance!

See matrix below for list of tools.

- · 2-in-1 carrying case has separate pocket to carry documents
- · Weight: 7.0 lbs.
- Size: 16.0"L x 12.0"W x 4.0"H

Part No. Description



167206

10 135968 26 piece tool kit......\$69.95 \$62.95 \$56.95

, <u>JAMECO</u> 55 Piece Tech Tool Kit

An assortment of tools for general and precision work for technicians, engineers, students, etc.



matrix below), the kit includes:

- 8" lineman's pliers
- screwdriver handle
- 6 piece mini-hammer set
- 5 piece of double edge blade
- · Carrying case has outer velcro pockets to store paperwork, etc.
- · Complete your assortment with a multimeter (see pages 135-142)

• Case size: 17.6"L x 12.8"W x 4.0"H • Wt.: 9.2 lbs. Part No. Description

JAMECO 26 Piece SAE **Hobby Tool Set**

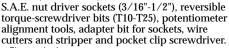
- 4 1/2" long nose pliers
- 4 1/2" diagonal cutting pliers • Tweezers
- Driver handle
- #1 and #2 Phillips bits
- #1 and #2 pozi bits
- 3/16" and 1/4" slotted bits
- Hex to 1/4" driver adapter
- T-10, T-15, and T-20 torx bits
- · 3" extension bar for 1/4" drive
- 3 slotted and 3 screw driver precision set • 3/16", 1/4", 11/32" and 3/8" (1/4") drive sockets
- Compact carrying case Weight: 1.5 lbs.

Part No. Description 1 170069 26 pc. SAE tool set..\$17.95 \$15.95 \$12.95

JAMECO 40 Piece Tool Kit

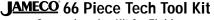
Includes: IC inserter with pin straightener, IC extractor, extra long 3-claw parts holder,

slotted and Phillips screwdriver bits. metric nut driver sockets (6mm-12mm),



- Zipper vinyl case
- Size: 9.5"L x 6.8"W x 1.4"H Weight: 1.7 lbs.

Part No. Description 119183 40 piece tool kit......\$19.95 \$17.95 \$15.95



Comprehensive Kit for Field Technicians and Engineers! Aluminum case

locks, a black plastic handle, side buckles and a strap. See matrix below for list of tools. · In addition to the

features removable

pallets, surface-type

- tools listed (see
- matrix below), the kit includes:
- 8" lineman's pliers - cassette head cleaning fluid - hobby vice
- keyboard/monitor spray cleaner mini vacuum cleaner long nose pliers with cutter – multimeter (digital)
- Size: 18.0"L x 14.0"W x 6.0"H Weight: 15.5 lbs.

Part No. Description 66 piece tool kit ..\$185.95 \$169.95 \$159.95 105646

JAMECO 26 Piece **Metric Hobby Tool Set**

- 6 screwdrivers (Phillips #0, #1, slotted 0.05" 0.08", 0.09", 0.12")
- 10 bits: 5, 6mm #No.1, #No.2, No.1, No.2, T-10,



- Stainless steel tweezers Sockets: 5, 6, 8, 10mm
- · 4" long nose pliers
- 4" side cutter

· Plastic carrying case · Weight: 1.2 lbs.

Part No. Description 99629 26 piece tool set \$16.95 \$14.95 \$13.49

. **JAMECO** 51 Piece Machine Tool Kit

Essential Kit for Electronic Machine Maintenance and Repair Jobs!

See matrix below for list of tools. Also includes digital multimeter. Case features removable pallets, a combination lock and a cushioned, black plastic handle.



• Size: 12.5"L x 17.5"W x 3.5"H

Part No. Description 51 piece tool kit ..\$102.95 \$95.95 \$85.95

69 Piece Professional Electronic and Computer Service Tool Kit

- · In addition to the tools listed (see matrix below), the kit includes:
- 40 pc. socket pack (8PK-227)
- 3 piece trimmer set
- carpenter hammer
- stainless steel sping hook
- 2 pc. removable pallets
- 6" slip joint plier
- -6" side cutter -6" long nose plier
- 8" combination plier - solder wick
- Size: 18.5"L x 13.8"W x 6.7"H Weight: 22.8 lbs.

Part No. Description 149024 Professional jumbo tool kit \$229.95 \$205.95

Turtito. Description	•		10 1 41111	0. D030i	iption
136311 55 piece tool kit\$12	9.95 \$116	.95 \$105.	95 1056	46 66 pi	ece tool ki
Parts included in kits	105646	26681	136311	135968	149024
3-piece soldering aid kit	1	1	1		1
3-prong holder	1		1		1
5-way crimping tool	1		7-way		1
6 precision screwdrivers	long	short	1		1
7-piece hex key wrench		1	1	1	1
10 foot measuring tape		1		1	1
10-piece mini wrench set	1(SAE)				1
30 watt soldering iron	1	1	1	1	1
Adjustable wrench	1	1	1	1	1
Anti-static strap	1		1		1
Bent needle nose pliers		1	1		1
Brush	1	1	1		1
Brush and scraper					
Carrying case	1	1	1	1	1
Desoldering pump	1	1	1	1	1
Diagonal cutting pliers	1	1	1	1	1
Electrical test screwdriver	1			1	
Electrician's tape	1	1			1
Fine point probe					

14100170 4107170 4107170	170=1 110	rooororiar j	ui i i i i i i i i i i i i i i i i i i	4 == ///	, 4=00.70
Parts included in kits	105646	26681	136311	135968	149024
Flat nose pliers	1	1	1	1	1
Forceps					1
Heat sink			1		1
Heavy-duty utility knife	1	1	1	1	
IC extractor	1		1	1	1
Inspection mirror					1
Mini drill	1				1
Mini flashlight	1		1		1
Needle files	5	2	5		5
Needle nose pliers	1	1	1	1	
Precision wire stripper					1
Rosin core solder	1	1	1	1	1
Screwdriver set (*Pro-soft)	13-pc	10-pc	2-pc	6-pc	9-pc*
Slotted probe					
Snipe nose pliers					1
Soldering stand	1	1			
Stainless steel scissors	1	1			
Tweezers	1	1	2	1	
Utility components box	1	1			1

134 Power Supplies and Test Equipment

JAMECO 150 Watt Digital **Benchtop Power Supply**

30VDC @ 5A

- Output voltage: 0-30VDC
- · Output current: 0-5A
- Constant voltage and current operation
- · Power requirements: 110/220VAC @ 50/60Hz (switch selectable)
- · Color coded terminals for positive, negative and ground connections
- 2A @ 250V fuse
- · LED displays for both current and voltage
- · Coarse and fine adjustment knobs for current · Dual digit display
- Please select input voltage to appropriate line voltage
- Size: 5.4"W x 10.7"D x 6.0"H
- · Weight: 13.8 lbs. One-year warranty
- Part No. Description 153242 30VDC @ 5A\$199.95 \$179.95 \$159.95

. JAMECO 150 Watt Power **Benchtop Power Supply**

50VDC @ 3A

- Output voltage: 0-50VDC
- · Output current: 0-3A
- · Constant voltage and current operation
- · Power requirements: 110VAC @ 60Hz
- · Color coded terminals for ground, positive and negative terminals
- 3A @ 115V fuse
- · Color coded adjustment knobs for voltage, current and fine adjustment
- · Color: black
- · Weight: 12.3 lbs.
- Description Part No.
- · One-year warranty
- 50VDC @ 3A...\$134.95 \$119.95 \$110.95

JAMECO 250 Watt Bench Top **Power Supply**

50VDC @ 5A

- · Output voltage: OVDC to 50VDC
- · Output current: 0-5A
- · Constant voltage and current operation
- · Power requirements: 220VAC @ 50-60Hz
- · 5A @ 250V fuse
- · Isolated ground
- · Color coded terminals for ground, positive, negative
- · Color coded adjustment knobs for voltage, current, and fine tuning
- · Color: dark gray
- Weight: 13.8 lbs. Size: 4.9"L x 7.7"W x 6.7"H

JAMECO 50mV/50A Current Shunt

· Current range: 0 to 50A

DPS5050.

· Accuracy: 0.8% ±0.2mV

175249

- Output ratio: 1mV/1A
- Applications: laboratory measurement of current
- between two points Size: 5.3"L x 1.2"W x 1.4"H Part No. Description 162309 Current shunt......
- · Max. current: 100A · Weight: 0.3 lbs. 10 .\$24.95 \$22.49 \$19.95

.\$159.95 \$143.95 \$130.95

JAMECO 225 Watt Bench Top Switching Power Supply

15VDC @ 15A

- · Output voltage: 9VDC to 15VDC
- Output current: 25A max. (22A continuous @ 13.8VDC)
- Constant voltage and current operation
- Over voltage protection @ 16.5V
- · Short circuit protection @ 27.5A
- · Power requirements: 110VAC/220VAC @ 47-63Hz (switchable)
- · Color coded adjustment knob and output terminals for voltage
- · Cigarette plug for current output
- · Power and fan LED indicator · Built-in fan
- · Voltage and current panel meter
- Size: 5.6"L x 6.2"W x 4.0"H · Weight: 3.8 lbs.

Part No.	Product No.	1	10	25
175257	SPS250A	\$139.95	\$124.95	\$109.95

JAMECO 150 Watt Bench Top **Linear Power Supply**

15VDC @ 10A

- · Output voltage: 2VDC to 15VDC
- · Output current: 15A maximum
- · Constant voltage and current operation
- Power requirements: 110VAC @ 50Hz



- · Color coded terminals for positive and negative terminals, voltage adjustment knob
- · Over voltage, over current, short-circuit protection
- · Cigarette output current plug · Built-in fan
- · Led indicator for power and warning
- · Current and voltage panel meter
- Size: 5.7"L x 6.2"W x 4.0"H · Weight: 12.0 lbs. Part No. Product No. 10

175265 DPS150A.......\$129.95 \$116.95 \$104.95

JAMECO Mini DC/AC **Current Clamp Meter**

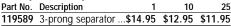
- Bright 1/2" LCD display with DATA HOLD
- · 0.5" digit height
- · Complete with test leads, manualand case
- Compatible with P/N 162325
- (above right)

· Requires 9V bat-

- DCV Size: 7.1"L x 1.9"W x 1.4"H
- 20A, 200A ±1.2% + 5d 200A 500V ±1.2% + 5d ±1% + 2d ±0.8% + 1d ±1.2% + 1d Resistance 200Ω *Frequency Response 40-400Hz External knob for DCA Zero Adjust
- tery not included (P/N 151095, pg 82) · Weight: 0.9 lbs. · One-year warranty
- Part No. Description 115756 Mini DC/AC clamp meter .. \$109.95 \$89.95

EXTECH 15A AC Line Separator

- X1 and X10 clamp areas
- Size: 6.0"L x 2.1"W x 1.1"H
- 15 amp max.
- · Weight: 0.4 lbs.
- · One-year warranty





3-Prong US Connector Type Plug

Maximum overload:

- 250VAC @ 15A X1 and X10
- clamp areas for measuring current
- Convenient 0.1"Dia.
- meter tip test points for neutral/earth/line Compatible with P/N 115756 (below left)
- Output socket compatible with US and European 3-prong power connectors
- Size: 6.0"L x 1.9"W x 1.4"Thick
- · Weight: 0.4 lbs. · One-year warranty

Part No.	Description 1	10	
162325	3-prong separator\$11.95	\$9.95	

- Reconditioned · 90-day warranty
- · Operation specification manuals & accessories included

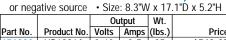
PACKARD 100MHz Logic Analyzer Reconditioned

- · 80 channels of 35MHz state/ 100MHz timing
- Configurable analyzer: one state, two state, state/timing
- · State sequency: 8 levels
- · Broad support for microprocessors, busses and interfaces
- · Memory: 1Kbit/channel
- Size: 16.6"W x 14.0"D x 7.7"H Weight: 32.0 lbs.

Part No.	Product No.	Price
156304	HP1650B	\$3499.95

M HEWLETT® General Purpose DC Power Supply Reconditioned

- · Constant voltage/ current operation
- · Remote sensing and programming
- · Auto-series, -parallel, & -tracking operation
- Floating output use as positive



		l Or	itput	VVT.	
Part No.	Product No.	Volts	Amps	(lbs.)	Price
156380	HP6291A	0-40	0-5	35	\$549.95

Information at Your Fingertips

Log on to our web site for specials, technical tips and expanded product information

www.jameco.com



While

TPI digital meters are field test proven to provide the specific needs for the troubleshooter. Includes test leads, batteries, instruction manual and 3-year warranty.

- · Carrying pouches provided with clamp meters
- · Protective boots provided with multimeters



Highlights:

vear



Perfect for in-home and hobbyist



Capacitance checking up to 20,000 YF



Triple display True RMS



Pocket-sized with easy line distortion



All applications with True RMS and



Clamp adapter plugs into any DMM AC/DC

Three-ye				checking	AC/DC current	
Features Three-year	TPI 133	TPI 135	TPI 185	TPI 255	TPI 296	TPI A296*
Digit Height	0.52"	0.83"	0.75"	0.45"	0.43"	N/A
Display Count	2000	4000	4000	4000	4000	N/A
AC/DC Volts	750/1000	750/1000	750/1000	600/600	600/600	N/A
Basic DC Accuracy	0.5%	0.5%	0.3%	0.3%	0.75%	N/A
AC/DC Amps	10/10	10/10	10/10	400/NA	700/700	400-1000/400-1000
HDR Mode	NA	NA	NA	NA	YES	N/A
True RMS	NA	NA	YES	NA	YES	N/A
Resistance	20ΜΩ	40MΩ	40MΩ	$40 M\Omega$	40MΩ	N/A
Capacitance	NA	20000μF	400µF	NA	NA	N/A
Frequency	NA	NA .	200KHz	NA	10KHz	N/A
Analog Bar Graph	NA	NA	YES	NA	YES	N/A
Auto Range/Data Hold	NA/YES	NA/YES	YES/YES	YES/YES	YES/YES	N/A
Min/Max/Peak	NA	NA	(Min/Max only)	YES	YES	N/A
Sleep Mode/Auto Off	NA	NA	YES/NA	NA/YES	YES/NA	N/A
RS232 (cable & software)	NA .	NA .	Included	NA	NA	N/A
Dimensions (L"xW"xH")	7.75 x 3.75 x 2.25 [†]	7.75 x 3.75 x 2.25 [†]	7.75 x 3.75 x 2.25 [†]	7.5 x 3.0 x 1.5	9.0 x 3.25 x 1.75	7.2 x 2.5 x 1.4
CE or cULus Listed	cULus,UL3111-1,CE	CE	cULus,UL3111-1,CE	cULus,UL3111-1,CE	cULus,UL3111-1,CE	_
Weight (lbs.)	1.7	1.7	1.8	1.2	1.2	1.1
Part Number	162991	163002	163011	163029	163037	170501
Quantity 1	\$59.95	\$89.95	\$179.95	\$99.95	\$189.95	\$69.95
Pricing 10	\$53.95	\$79.95	\$159.95	\$89.95	\$169.95	\$62.95
* and ball to all DAMA in shad.						

* applicable to all DMM in stock

† size with protective boot

ipi 440 Scope Plus

Six Units in One!

- 4,000 count True RMS DMM
- · 1MHz oscilloscope bandwidth
- Component test Trend mode • Frequency counter • Logic test
- 20MHz sampling rate
- · Trend mode allows you to record sine waves for a period of time

Description 160805 168330 RS232 software and cable...69.95

Digital oscilloscope......\$349.95 \$339.95 62.95 170499 Rubber boot for TPI440 19.95 17.95

Protek True RMS Digital Multimeter

- 0.05% accuracy 50,000 count
- RS-232C and category II 600V
- DC voltage range: (4) 5V 1000V
- AC voltage range: (4) 5V 750V
- DC current range: (6) 500μA 10A
- AC current range: (3) 5000μA 10A
- Resistance range: (7) $10\Omega 30M\Omega$
- Capacitance range: (7) 5nF 5000µF · Low power ohm function, zener/diode test, conductance mode, duty cycle and pulse width, capacitance,
- frequency counter mode, and go/no go testing · Includes holster, manual, probes, RS-232 cable and software
- Size: 8.0"L x 3.5"W x 1.5"D · Weight: 1.0 lb.

Part No. Description 177164 Digital multimeter\$299.95 \$269.95

BK PRECISION Digital Multimeter

BK5360

- · Precision 50,000 count instrument
- · True RMS reading
- · Auto manual ranging
- · Large LCD display provides easy readability, all test parameters in clear view (0.55" digit height with 34 segment analog bar graph)
- · AC/DC voltage protection
- · Continuity and diode testing
- · CE safety approved
- AC voltage: 500mV to 750V (100uV to 1V resolution)
- DC voltage: 5V to 1000V (10uV to 100mV resolution)
- AC current: 5mA to 10A (1uA to 10mA resolution)
- DC current: 500uA to 10A (10nA to 1mA resolution)
- Resistance: 500Ω to $50M\Omega$ ($10m\Omega$ to $1K\Omega$ resolution)
- Capacitance: 50nF to 50mF (10pF to 10µF resolution)
- Frequency: 0.6Hz to 500KHz
- · Includes probes and manual
- Size: 7.5"L x 3.2"W x 1.6"H
- · Weight: 1.5 lbs.

Part No.	Product No.	1	10
185199	BK5360\$	209.95	\$188.95

BK PRECISION Digital Multimeter

· Precision 50,000 count instrument

BK5380

- · True RMS reading
- · Auto manual ranging
- · Large LCD display provides easy readability, all test parameters in clear view (0.55" digit height with 34 segment analog bar graph)
- · AC/DC voltage protection
- · Continuity and diode testing
- · CE safety approved
- · 0.025% basic DVC accuracy
- AC voltage: 500mV to 750V (10uV to 100mV resolution)
- DC voltage: 5V to 1000V (10uV to 100mV resolution)
- AC current:500uA to 10A (10nA to 1mA resolution)
- DC current:500uA to 10A (10nA to 1mA resolution)
- Resistance: 500Ω to $50M\Omega$ ($10m\Omega$ to $1K\Omega$ resolution)
- Capacitance: 50nF to 50mF (10pF to 10pF resolution)
- · Frequency: 0.6Hz to 500KHz
- · Includes probes and manual
- Size: 7.5"L x 3.2"W x 1.6"H
- · Weight: 1.5 lbs.

Part No. Product No.		1	1	
185201	BK5380	\$279.95	\$251	95





136 Test and Measurement Equipment

Vellemen Digital Hand-held 5MHz Sampling Rate Oscilloscope

- · Maximum sampling frequency: 5MHz for repetitive signals; 0.5MHz for single shot events
- Input impedance: 1MΩ/20pF (standard oscilloscope probe)
- · Maximum input voltage: 100V peak (AC + DC)
- · Input coupling: DC, AC, and GND (GND for auto zero reference) • Linearity: ±1 bit
- · LCD graphics display: 64 x 128 pixels (64 x 96 pixels for signal)
- · High contrast LCD display w/ 3.3" viewing angle
- Vertical resolution: 8-bit (6-bit for LCD)
- · Timebase range: 2µs to 20s/div
- · Input sensitivity: 5mV to 20V/div
- Trigger mode: run; normal; once, and ± slope
- · True RMS and dB measurements
- · Screen hold function · Auto power off or continuous on
- Recommend 9VDC @ 300mA power supply (P/N 133891, pg 89) • Includes insulated BNC to alligator clip measurement probes and case
- · Batteries not included, recommend P/N 32627 or P/N 151087 (pg 82)
- Size: 8.7"L x 4.2"W x 1.5"H Weight: 1.6 lbs.

Part No. Description

168823 5MHz scope (Model HPS5) ..\$199.95 \$179.95

BelMERIT 31/2-Digit Multimeter

- · 0.7" digit height
- · Large 3½-digit liquid display (LCD) readout with function and range annunciators, .25% basic accuracy
- DC/AC current range: 200µ-10A
- Voltage range: 200m-1000VDC, 200m-750VAC
- Resistance range: $200-20M\Omega$
- Capacitance range: 2n-20µF
- · Frequency range: 2K-20MHz
- · Input protection to 500vrms, DC/AC 10A fuse protection • 10 functions and 39 ranges
- · Data hold function and input warning beeper
- · Includes standard 9V battery, test leads, manual and deluxe holster · Auto power off
- Size: 3.9"W x 2.3"D x 8.0"H Weight: 1.5 lbs.
- Three-year manufacturer's warranty CE approved Part No. Product No. Description

3½-digit meter\$69.95 \$62.95 **141250** DX405

BelMERIT 31/2-Digit Multimeter TTL and CMOS logic testing capabilities

- · 0.7" digit height
- · 12 function with 44 ranges
- · Automatic power off
- · Transistor hfe for NPN and PNP
- · DC/AC current to 10A fuse protected AC voltage: 200m, 2, 20, 200, 750V
- DC voltage: 200m, 2, 20, 200, 1000V • AC/DC current: 200µ, 2m, 20m,
- 200m, 2, 10A
- Data and peak hold
- Capacitance: 2n, 20n, 200n, 2μ, 20μF
- Frequency: 2K, 20K, 200K, 2M, 20MHz
- Resistance: 200, 2K, 200K, 2M, 20M, 2000MΩ
- · Includes 9V battery
- Size: 3.9"W x 2.3"D x 8.0"H Weight: 1.5 lbs.
- · Three-year manufacturer's warranty

Part No. Product No. Description 140273 DX451 3½-digit meter \$79.95 \$71.95

BelMERIT 31/2-Digit Multimeter LCR, Logic and Frequency Test

- 0.7" digit height Auto power off 12 functions & 43 measuring ranges
- Input warning beeper and $10M\Omega$ impedance • Data and peak hold
- AC voltage: 200mV 750V
 DC voltage: 200mV 1000V
- Resistance: 200Ω $20M\Omega$
- Frequency: 2KHz 20MHzCapacitance: 20nF 2000µF
- Inductance: 20mH 20H
- AC/DC current: 200µA 10A (protected by fuse) Continuity test and diode test, TTL and CMOS logic test
- Includes manual, test probes and 9V battery
- Size: 4.0"W x 1.5"D x 8.0"H Weight: 2.7 lbs. Three-year manufacturer's warranty • CE approved

Part No. Product No. Description 147096 DX460L 3½-digit meter\$99.95 \$89.95

BelMERIT 31/2-Digit Tester

Capacitance and Resistance

- · Large 0.7" LCD display
- Capacitance: 200pF 20mF Resistance: 20Ω $2000M\Omega$
- Dual zeroing knobs (C & R)
- Continuity beeper & diode
- Test leads w/ clips Weight: 0.7 lbs.
- Size: 6.5"H x 3.1"W x 1.7"D
- One-year manufacturer's warranty

Part No. Product No. Description

166828 CM215 31/2-digit tester.....\$59.95 \$54.95

BelMERIT Digital Clamp Meter

- 3¾-digit, liquid displays(LCD) with a maximum reading of 1999 and 4000 count LČD screen with annunciators
- Current range: 400A, 600A (AC) Voltage range: 750VAC, 400VDC
- Resistance range: 4000Ω • 0.5" digit height
- Tear drop jaws 1.3" (32mm) opening for ease of use Electronic overload protection up to 500VAC and DC on all ranges • Data hold function and peak hold function
- Includes standard 9V battery test leads, manual & case · Weight: 1.0 lb.
- Size: 8.0"L x 3.3"W x 1.5"D One-year manufacturer's warranty

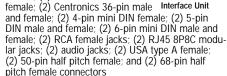
Part No. Description

140644 Digital clamp meter\$79.95 \$71.95

. IAMECO PC Cable Tester

Multimedia, USB, SCSI

- Complete testing interface for PC, multimedia, Control Panel & and USB cables
- Integrates with the SCSI and ribbon cable tester
- Tested ports: (2) DE9 male and
- female; (2) HDDB15 male and female; (2) DB25 male and

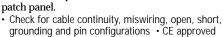


- Power requirements: 9V battery (recommend P/N 151095 pg 82) or 9VDC adapter (recommend P/N 100845 pg 89) • Includes manual, (1) 5-pin DIN male to male adapter cable, (1) 6-pin mini DIN male to male adapter cable, and (2) 40-pin IDC cables
- Size (SCSI tester): 6.9"L x 5.1"W x 1.5"H
- Size (Interface unit): 9.7"L x 5.4"W x 1.4"H

Part No. Description 5.1......**\$399.95 \$359.95** 175513 Cable tester

JAMECO LAN Tester with Remote

Can easily read correct pin configuration of 10baseT, 10base2, RJ45/RJ11 modular cables, 258A, TIA568A/ 568B, token ring, etc. Test cables installed from a distance either on wall plate or



- Includes manual and test cable(s)
- · Cable adapters: RJ45 M-M, (2) RJ45M-BNCM and BNC F-F
- On-board connectors: (2) RJ45F (tester) and (1) RJ45F (remote)
- Size: 4.0"L x 2.5"W x 1.0"H (Main console)
- Size: 4.0"L x 1.3"W x 1.0"H (Remote)
- · Weight: 0.7 lbs. · One-year warranty

Part No. Description 145710 LanTest cable tester.....\$79.95 \$71.95

JAMECO Ethernet Cable Tester

- · Connector type: RJ45 8P8C
- System used: 258A, 356A, AT&T/Ethernet 10BaseT
- Test performed: miswire, open, short
- Zipper case included
- Requires 9VDC battery (not included)
- Size 4.5"L x 2.5"W x 1.3"H Weight: 0.4 lbs

Part No. Description 115895 Network Cat. 5.....\$22.95 \$19.95

BelMERIT Cable Tester UTP, STP, and Coaxial Cables

- · Detects opens, shorts, and cable distance · Measures distance to the open or short on the cable • 0.7" digit height
- Tests 50Ω coaxial cable (RF or LAN cable), 75Ω coaxial cable (VIDEO or cable TV), 100Ω UTP shielded or unshielded cable (LAN)
- Dist. range: $50\Omega/75\Omega$ coax cable: 4–984 ft.
- Dist. range: 100Ω twisted pair cable with RJ45 jack: 4-328 ft.
- Dist. range: 100Ω twisted pair bare wire with alligator clip: 4-984 ft.
- Distance resolution: 1 ft.
- Accuracy: open (±7% +4 ft.); short (±10% +4 ft.)
- · Includes manual, alligator clip to BNC adapter (7"L), carrying case, and 4 AA alkaline batteries
- Size: (unit) 7.0"L x 2.8"W x 1.2"H
 Weight: 1.5 lbs.

Part No. Description 171352 UTP/STP/coax.....\$169.95 \$152.95

Paladin Tools PC Cable-Check™ Tester

Check many different types of cables. It tests standard computer cables for open, shorted and cross-connected wires. In addition, PC Cable-Check™ tests any combination of D-sub 9-pin, D-sub 15-pin, D-sub 25-pin, Centronics 36-pin printer plus RJ11 and RJ45 telephone plugs. RG58, RG59 and RG62 BNC connections with pass or fail diagnosis clearly shown on LED readout.

- Includes battery and manual
 One-year warranty
- Size: 9.3"L x 5.5"W x 1.8"H · Weight: 1.7 lbs. Part No. Description

123916 PC cable-check™......\$149.95 \$134.95





JAMECO RJ11 Cable Tester

- · Tests RJ11 cables for continuity, miswiring, reverse wiring, and straight through wiring
- 2 connectors for RJ11 type (6P6C)
- · LED indicators for single, double, or triple pair wires
- · LED off for open wiring, red indicator for crossed pins, and green indicator for straight through pins
- Requires 9V battery (recommend P/N 151095, pg 82)
- · Includes instruction sheet and leather case
- Size: 4.1"L x 2.5"W x 1.0"H Weight: 0.3 lbs.

Part No. Description 181163 RJ11 cable tester\$19.95 \$17.95

JAMECO Breakout Box

- · Connector type: RJ45 8P8C
- · System used: Ethernet 10-base-T, IBM token ring, EIA/TIA (T568A), AT&T (T568B)
- · Test performed: Transmission signal, status access
- · Includes zipper case
- Size: 4.5"L x 2.5"W x 1.3"H
- · Weight: 0.4 lbs.

Description 115879 Breakout box ...

..\$29.95 \$26.95

AND DESTRUCTION

BK PRECISION Function Generator

0.5 to 5MHz

Unit has been engineered for high reliability and user operating convenience.

· Waveforms: sine, square, triangle,

TTL/CMOS output, and ramp • 100% DC offset

· Variable duty cycle

· Coarse and fine tuning

• Size: 10.4"W x 11.7"D x 3.4"H • Weight: 6.2 lbs.

Two-year warranty

· Digital display

Part No. Product No. Description 160469 BK4011A 0.5 to 5MHz\$314.95 \$299.95

AA battery included

BK PRECISION Analog Multimeter

- · AC/DC voltage to 500V
- DC current to 250mA
- Resistance to $1M\Omega$
- 9V & 1.5V battery test
- · Easy-to-use manual range selection
- Decibel measurements up to 56dB CE approved
- IÉC 1010-1 Cat II 300V
- · One-year warranty
- Size: 3.2"W x 1.2"D x 4.7"H Weight: 0.4 lbs. Part No. Product No. Description

Analog meter.....\$19.95 \$17.95 **160506** BK117B

JAMECO Digital LCR Meter

- 3½-digit display (0.5" digit height)
- Measures inductance: 0.1µH to 200H
- Measures capacitance: 0.1pf to $2000\mu f$
- · Measures resistance: $1m\Omega$ to $20M\Omega$
- · Dissipation factor measurement
- · Includes test-leads and 9V battery
- Size: 6.7"L x 3.3"W x 1.4"D
 Weight: 1.1 lbs.
- One-year warranty

Part No. Description 127538 LCR meter \$149.95 \$135.95 \$122.95

BK PRECISION Sine/Square **Wave Audio Generator**

20Hz-150kHz

Small, convenient and extremely portable, this little audio generator can be used to test speakers and audio equipment normally found in field service application.

- Sine and square wave generator
- 20Hz to 150kHz in 46 steps
- · Low distortion R-C oscillator · Variable output control
- Low battery indicator
- Includes 9VDC battery
- Compact, fully portable, light weight
- One-year manufacturer's warranty
- Size: 5.9"L x 3.2"W x 0.8"H Weight: 0.7 lbs.

Part No. Product No. Description **166334** BK3001 Audio generator \$78.95 \$68.95

METEX[®] 4 in 1 Universal System with Function Generator, Universal Counter, **DC Power Supply and Digital Multimeter**

· Function generator capable of generating seven forms of waves (sine, square, triangle, skewed sine, ramp, pulse, and TTL square wave) in the seven



frequency range sourcing from 0.2Hz to 2MHz Universal counter, capable of measuring

frequency ranges from 5Hz to 1.3GHz DC power supply, capable of generating with 5V @ 2A, 15V @ 1A fixed and 0 to 30V @ 0 to 2A variable

Digital multimeter capable of measuring DC voltage (400mV to 100V), AC voltage (400mV to 750V), DC/AC current (40mA to 20A), resistance (400 Ω to 40M Ω), capacitance (4nF to 400µF) and diode measuring forward resistance of a semiconductor junction in $K\Omega$

Includes manual, cables and software

Size: 14.5"W x 14.0"D x 7.0"H
 Weight: 37 lbs.

· One-year warranty

Part No. Product No. Description 160864 MS9150 4 in 1 univ. sys. \$549.95 \$499.95

METEX[®] 4 1/2 Digit Benchtop Multimeter

- 19999 display counts with automatic polarity indicator
- 1-2 readings per second
- DC voltage (range/resolution): 200mV to 1000V/ 10uV to



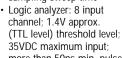
100mV w/ accuracy of 0.1% +5 digits

- AC voltage (range/resolution): 200mV to 750V/ 10uV to 100mV with accuracy of 2.5% +10 digits
- DC current (range/resolution): 2mA to 20A/ 100mA to 1mA with accuracy of 0.5% +3 digits
- AC current (range/resolution): 2mA to 20A/ 100mA to 1mA with accuracy of 2.5% +10 digits
- Resistance (range/resolution): 200Ω to $20M\Omega$ / 0.01Ω to 1K $\!\Omega\!$ with accuracy of 0.5% +5 digits
- Frequency (range/resolution): 20KHz to 20MHz/ 1Hz to 1KHz with accuracy of 0.1% +2 digits
- · Logic, diode and continuity testing
- Includes manual, power cable, probes and software
- Size: 11.2"L x 8.2"W x 3.2"H Weight: 7.5 lbs.
- One-year warranty

Part No. **166852** MXD4660A**\$249.95 \$224.95**

METEX[®] 20MHz Digital **Oscilloscope**

- 4 in 1 test equipment: oscilloscope, DMM, frequency counter and logic analyzer
- Easy to read 3.8"W x 2.8"H LCĎ display
- · Oscilloscope: 2 channel input, 5mV/div ~ 2V/div sensitivity; DC ~ 20MHz (-3dB) @ equivalent sampling bandwidth; 50ns/div ~ 0.5us/div @ equivalent sampling sweep time





(Shown w/ logic probe P/N 162974 - not included)

more than 50ns min. pulse width

- Digital multimeter: 3¾ digit (max 3999 counts); 40 segment analog bargraph; AC/DC voltage from 400mV to 600V; AC current from 40µA - 400mA; DC current from 400µA - 400mA; resistance from 400Ω to $40M\Omega$; continuity and diode testing
- Frequency counter: 5Hz ~ 20MHz (19.999MHz); 5 digit max. display; autoranging; AC/DC/DC input coupling; ± 10ppm accuracy; maximum input of 35Vrms/ 42V peak/ 60VDC max
- Oscilloscope probes use P/N 22891/66149/ 140687 (pg 143) • One-year warranty
- Includes manual, 5VDC @ 3A power supply, power cord, DMM test leads, holster and case
- Size: (unit) 10.0"L x 5.0"W x 2.0"H Wt: 9.2 lbs.

Part No.	Description	1	5
162430	20MHz digital scope\$7	799.95	\$749.95
162974	Logic probe	.59.95	53.95
163141	Rechargeable battery	.59.95	53.95
162966	RS232 cable and software		22.49

METEX Function Generator and Frequency Counter Function Generator 2Hz - 2MHz

Function Generator:

- Wave forms: sine, square, triangle, skewed, ramp, pulse and TTL level square
- Frequency: 2Hz to 2MHz in 7 ranges
- Output impedance: 50Ω ±10%
- Output amplitude: 2Vpp to 20Vpp at open load; 1Vpp to 10Vpp at 50Ω load
- Offset variable range (max.): ±10VDC at open load
- · Frequency sweep time: 20mS to 2S

Frequency Counter:

- Measuring range: channel A 5Hz to 100MHz; channel C - 100MHz to 1500MHz
- · Input sensitivity: 30mVRMS sinewave for 100MHz to 1300MHz; 70mVRMS for 1300MHz to 1500MHz
- Max. input voltage: channel A 250Vp-p; channel C - 3Vp-p • Time base switchable
- Input impedance: channel A $1M\Omega$; channel C 50Ω
- Resolution: 10MHz or less 6-8 digits/ 0.1S to 10S: 100MHz or more - 0.1Hz - 10Hz/ 0.1A to 10S

System Specifications

- · Includes coax cable, power cable, manual and software
- Size: 11.0"L x 8.2"W x 3.7"H Weight: 13.4 lbs.

Part No. Description 166844 Function generator/counter...\$299.95 \$269.95



METEX® Handheld Digital Multimeters

METEX[®] 3½-Digit Multimeter with Computer Interface

• 31/2-digit LCD (.65" digit height) with analog bar

Computer interface (RS232C) DE9M/F cable w/ DOS/Win® software (3.5" diskette)

· Data hold

· AC voltage/resolution: 200mV - 750V @ 100µV - 1V

 DC voltage/resolution: 200mV - 1000V @ 100µV - 1V

Resistance/resolution: 200Ω - 2000M Ω @ 0.1Ω - 1M Ω

· AC/DC current/resolution: 2mA - 20A @ 1µA - 10mA

• Frequency/resolution: 2kHz - 2MHz @ 1Hz - 10kHz

· Diode, logic test and continuity test

Agency approved CE/TUV

 Includes operating manual, probes, 9V battery and 3.5" software One-year warranty Size: 3.0"W x 1.5"D x 7.2"H • Weight: 1.8 lbs.

Part No. Product No.

155483 ME-21\$59.95 \$53.95 \$44.95

METEX® 3½-Digit Multimeters with Computer Interface and Temperature Measurement

• 3½-digit LCD (.65" digit height) with analog bar • Data hold with analog bar

 Computer interface (RS232C) DE9M/F cable w/ DOS/Win^e software (3.5" diskette)

AC voltage/resolution: 200mV - 750V @ 100μV - 1V

DC voltage/resolution: 200mV - 1000V @ 100µV - 1V

Resistance/resolution: 200Ω - 2000MΩ @ 0.1Ω - 1MΩ· AC/DC current/resolution:

2mA - 20A @ 1µA - 10mA

• Frequency/resolution: 2kHz - 20MHz @ 1Hz - 10kHz

• Temperature: -40°C - 1200°C @ 1°C resolution

Diode, transistor hfe for NPN and PNP, logic test and continuity test
 One-year warranty

· Agency approved CE/TUV

 Includes operating manual, probes, K-type thermocouple, 9V battery and 3.5" software Size: 3.0"W x 1.5"D x 7.2"H
 Weight: 1.9 lbs.

Part No. Product. No. \$56.95

METEX® 3½-Digit Multimeter with Computer Interface & Dual Display

• 31/2-digit LCD w/ 2000 counts (.65" digit height)

Auto/min/max/data hold function

· Tests continuity, diode, transistor hfe, frequency, capacitance and temperature

 Measures AC/DC voltage AC range: 200mV - 750V with 100uV to 1V resolution; DC range: 200mV - 100V with 100uV to 1V resolution

· Measures AC/DC current: AC range: 2mA - 20A w/ 0.1uA - 10mA resolution; DC range: 2mA - 20A w/ 0.1uA - 100mA resolution

• Measures resistance: 200Ω to $20M\Omega$ with 0.1Ω to 10K Ω resolution · One-year warranty

Agency approved CE/TUV

· Includes PC interface cable, probes, temperature probe, manual, software and 9V battery

• Size: 3.2"W x 1.2"D x 7.1"H • Weight: 1.8 lbs. Part No. Product No. **160813** M3640D......\$99.95 \$89.95 \$79.95

METEX[®] 3¹/₂-Digit Multimeter .5" Digit Height • LCD Readout

 AC voltage/resolution: 200mV/100μV, 2V/1mV, 20V/10mV, 200V/100mV, 700V/1V

DC voltage/resolution: 200mV/100μV, 2V/1mV, 20V/10mV, 200V/100mV, 1000V/1V

AC & DC current/resolution: 20μA/10nA, 200μA/100nA, 2mA/1µA, 20mA/10µA 200mA/100μA, 2A/1mA, 20A/10mA

Resistance/resolution: $200\Omega/0.1\Omega$, $2K\Omega/1\Omega$,

20K Ω /10Ω, 200K Ω /100Ω, 2M Ω /1K Ω , 20M Ω /10K Ω

Auto zeroing • Input impedance: $10M\Omega$ Overload protection: 1000VDC/750VAC

Agency approved CE/TUV

Includes probes, carrying case, manual and 9V battery

See page 144 for compatible leads (P/Ns: 77745, 77770, 21856, 21864)

Size: 3.5"W x 1.3"D x 6.8"H · Weight: 1.2 lbs.

One-year warranty

Part No. Product No. Description **27115** M3800 3½-digit.....\$39.95 \$35.95 \$32.49

METEX[®] 3½-Digit Multimeter with Computer Interface and C € Temperature Measurement



• 3½-digit LCD (.75" digit height) Computer interface (RS232C)

w/ software (3.5") and cable
• Measures AC/DC voltage: AC current (400mA to 20A) DC current (400mA to 20A)

Measures resistance (400 Ω to $40M\Omega$), diodes, & continuity

 Autoranging all scale settings Temperature measurement probe

(-40°C to +1200°C) Measures transistor hfe, frequency, and capacitance · Data hold switch One-year warranty

Agency approved CE/TUV

Includes manual, software, RS232 interface cable, temperature probe and probes

Size: 3.3"W x 1.8"D x 7.2"H • Weight: 1.8 lbs.

Part No. Product No. 117372 M3850D.....\$109.95 \$99.95 \$89.95

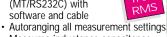
METEX[®] 3³/₄-Digit Multimeter with Computer Interface & Dual Display

• 3%-digit LCD (.6" digit height)

Measures AC/DC voltage: AC current (400mA to 20A) DC current (400mA to 20A)

Measures resistance $(400\Omega \text{ to } 40\text{M}\Omega)$

Computer interface (MT/RS232C) with software and cable



 Measures inductance capacitance, temp. (°C/°F), transistor hfe and frequency · One-year warranty

Agency approved CE/TUV

· Includes 9V battery and 3.5" software diskette

Size: 3.3"W x 1.8"D x 7.2"H · Weight: 1.9 lbs. Part No. Product No. **137461** M3860D......\$139.95 \$125.95



· AC voltage/resolution: 200mV/10μV, 2V/100μV, 20V/1mV, 200V/10mV, 750V/100mV

DC voltage/resolution: 200mV/10μV, 2V/100μV, 20V/1mV, 200V/10mV, 1000V/100mV

AC & DC current/resolution: 2mA/100nA, 20mA/1µA, 200mA/10μA, 20A/1mA Diode/continuity:

measures forward resistance of a semiconductor junction in $K\Omega$ a test current of approximately 30Ω

hfe: display reads approximate hfe value of transistor under test (all types)

Capacitance/resolution: 20nf/1pf 200nf/10pf, 20nf/1nf, 200nf/10nf

Frequency/resolution: 20KHz/1Hz, 200KHz/10Hz, 2MHz/100Hz

Agency approved CE/TUV

Includes software, test leads, PC interface, manual and 9V battery

Size: 3.3"W x 1.5"D x 7.5"H • Weight: 2.0 lbs.

 LCD size: 2.4"W x 1.3"H One-year warranty Part No. Product No.

144872 M4640A......\$**129.95 \$116.95**

METEX[®] 3³/₄-Digit Multimeter with Computer Interface & Multi Display

· 3%-digit LCD (0.6" digit height)

· Measures AC/DC voltage: AC range (400mV to 750V); DC range (400mV to 1000V) Measures AC/DC current:

AC range (4mA to 20A); DC range (400µA to 20A) • Resistance: 400Ω to $10M\Omega$

Capacitance: 4nf to 400μf

Frequency: 4kHz to 40MHz

Temperature: -40°C to 1200°C Measures transistor hfe and wattage

· 4000 maximum reading with automatic polarity display

• 2.5 measurements per second • One-year warranty

· Computer interface (RS232) w/ cable and software Agency approved CE/TUV

Includes 9V battery, probes and manual

Size: 3.2"W x 1.2"D x 7.5"H • Weight: 2.0 lbs.

Part No. Product No. **160821** M3860M......\$159.95 \$144.95

MASTECH 41/2-Digit Multimeter

· Extra large digits (0.8" digit height)

AC voltage: 2V to 700V

• DC voltage: 200mV to 1000V

 AC/DC current: 2mA to 10A • Resistance: 200Ω to $200M\Omega$

Frequency: 20KHz

Capacitance: 2000pf to 20µF

 Measures transistor hfe and continuity

 Hold button
 Auto power off Agency approved CE

 Includes protective boot, 9V battery, probes and manual

Size: 3.9"W x 1.9"D x 8.0"H

· Weight: 1.5 lbs. · One-year warranty

Part No. Product No. 136590 MY65.....**\$72.95** \$65.95 \$59.95





Refurbished Factory Products Listed in Yellow

Fluke 89 Series IV Digital Multimeter

.54" Digit Height

- 0.025% basic DC accuracy
- 50,000 count resolution with instant readings enables detailed analysis
- · 100kHz AC bandwidth
- Internal memory allows for stand alone uploading and storage of up to 1000 measurements for later viewing or uploading to optional Fluke View Forms Software
- MIN/MAX to record and timestamp values in real time; Fast MIN/MAX captures peaks to 250µs
- Temperature readings in °C or °F using optional K-type thermocouple
- Enhanced ranges, such as DC voltage measurements down to 10µV and capacitance up to 50mF
- Multiple reading display with bargraph has two level backlight
 Lifetime manufacturer's warranty
- Size: 3.8"W x 1.8"D x 7.5"H Weight: 2.6 lbs.

 Part No.
 Model No.
 Description
 1
 5

 164312
 FLK89-4
 89 series meter ...\$398.95
 \$368.95

Fluke 70 Series III Analog/ Digital Multimeters

.53" Digit Height

The 75/79 Series III raises the bar on affordable, high performance DMMs.

- Overvoltage protection, and the IEC 61010-1 safety rating to prove it
- The rugged overmolded case offers constant protection
- Large, easy to read display with analog bargraph
- Measure AC/DC volts, ohms, diode/continuity, and AC/DC amps
- · Lifetime manufacturer's warranty

160637: • Measure frequency and capacitance

• True RMS for measuring non-linear loads

Part No.	Model No.	Description 1	5
160602	FLK-75-3	600V Cat. III \$164.95	\$154.95
160637	FLK-79-3	True RMS208.95	198.95

Fluke 123 20MHz Industrial ScopeMeter®

Scope, Meter and Recorder in One Tool!

The Fluke 123 is the ideal choice for troubleshooting industrial machinery, instrumentation, control and power systems. Why? Because of a breakthrough in scope technology. We call it Connect-and-ViewTM.

The Fluke 123 automatically recognizes signal patterns and automatically sets up correct triggering, timing and amplitude for stable displays of complex industrial signals.

- Scope: dual input 20MHz oscilloscope
- · Meter: dual input 5000 count True RMS meter
- Recorder: dual channel TrendPlot™
- Size: 4.5"W x 2.0"D x 9.1"H Weight: 5.8 lbs.
- Three-year manufacturer's warranty

Fluke 16 Multimeter w/ Thermometer .48" Digit Height

Three Tools in One!

- Thermometer: accurate temp. measurements from -40° to 750°F (-40° to 400°C)
- Flame rod circuit tester: built-in microamp measurement down to 0.1µA (200µA max.)
- Multimeter with capacitance:
 AC/DC voltage up to 600V; resistance
 up to 40MΩ; diode test and
 exceptionally fast continuity; capacitors up to 10,000μF
- Size: 3.0"W x 1.1"D x 6.6"H Weight: 1.4 lbs.
- · Two-year manufacturer's warranty

 Part No.
 Model No.
 Description
 1
 5

 160573
 FLK-16
 Multimeter...\$128.95
 \$125.95

Fluke T5-1000 Electrical Voltage, Continuity and Current Tester

.43" Digit Height

The Fluke T5 electrical tester lets you check voltage, continuity and current with one compact tool. With the T5, all you have to do is select volts, ohms, or current and the tester does the rest.

- Automatically selects volts AC or DC
- Displays resistance to 1000Ω
- Easy and accurate OpenJaw™ current measurement
- Compact design with neat probe storage
 Weight: 1.0 lb.
- Size: 2.0"W x 1.2"D x 8.0"H
- · Two-year manufacturer's warranty

 Part No.
 Model No.
 Description
 1
 5

 160645
 T5-1000
 Tester............\$108.95
 \$98.95

Fluke 620R Cable Meter

- · Portable and easy to use
- Single person operation
- Detects shorts, opens, crossed wiring, reversed wiring, and split pairs
- Locates wiring / connection errors (distance to the open or short)
- Measures cable length (range: 1 to 999 feet with 1 foot resolution; 5% ±3 ft. accuracy)
- Displays in feet or meters
- Tests all LAN cable types: UTP, STP, FTP, Coax Tests 2/3/4 wire pairs • Refurbished
- One-year manufacturer's warranty
- Size: 7.3"L x 3.9"W x 1.8"H
 Weight: 0.8 lbs.

Part No. Model No. Description 1 5 182027 FLK620R 620 Refurb...\$449.95 \$429.95

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Fluke 99 Series B 100MHz ScopeMeter®

Fluke ScopeMeter® 99 Series B is one of the most powerful family of handheld digital storage oscilloscopes used by more engineers worldwide than any other.

- With the Fluke DP 120 differential voltage probe, measurements on two channels with different ground potential are easy and safe
- · 60 or 100MHz bandwith
- Dual channel DSO and 5 GS/s repetitive sampling provides excellent signal fidelity
- Extensive trigger capabilities Cursor measurements
- 30K deep memory ScopeRecord™
- True RMS, 3000 count DMM with 0.5% accuracy
- Size: 5.5"W x 2.5"D x 10.8"H Weight: 7.6 lbs.
- · Three-year manufacturer's warranty

Part No. Model No. Description 1 5 164099 FLK99B-003R Refurb.\$1699.95 \$1649.95

Fluke 10 Series Digital Multimeters

.47" Digit Height

The Fluke 10 Series DMM's are designed for first level electrical/electronic troobleshooting. Their compact design, slide switch and push button controls allow for true one-hand operation. The 12B has the same great functionality with an easy to use rotary dial.

- · 4000 count digital display
- · Cat-III 600V rated
- AC/DC volts, resistance and continuity
- Size: 2.8"W x 1.4"D x 5.6"H Weight: 1.2 lbs.
- Two-year manufacturer's warranty 162624:
- V-Chek $\mbox{\for automatic reading of AC/DC volts}$
- Capacitance: $1000-9999\mu F$
- Min/max record
- Continuity capture locates intermittent open/shorts Part No. Model No. Description 1

 162595
 FLUKE-10
 Model 10 meter \$78.95
 \$74.95

 162624
 FLUKE-12B
 Model 12B meter 98.95
 94.95

Fluke 87 Series III Analog/

Fluke 87 Series III Analog/ Digital Multimeter

.53" Digit Height

The 87 Series III DMM provides 11 functions for electronic and industrial applications, including high performance AC/DC voltage, frequency, duty cycle, resistance, conductance, and capacitance measurements.

- 41/2-digit mode (20,000 count) display
- 250us peak hold to capture fast transients
- · Improved EMI rejection for better performance
- Size: 3.4"W x 1.3"D x 7.4"H Weight: 2.6 lbs.
- · Lifetime manufacturer's warranty

 Part No.
 Model No.
 Description
 1
 5

 160565
 FLK-87-3
 True RMS\$348.95
 \$335.95





Fluke 1520 Megohmeter

- Large backlit LCD display with analog bar graph and digital display
- · Auto-shut off after 15 minutes of inactivity
- · Test voltages of 250V, 500V, and 1000V
- Display ranges: $4.0M\Omega$ / $40.0M\Omega$ / $400.0M\Omega$ / $4000.0M\Omega$
- · Measurement range: $0.2 M\Omega$ to $10 M\Omega$
- · Accuracy: 2% + 2 counts $(0.2M\Omega \text{ to } 100M\Omega);$ 10% + 2 counts $(100M\Omega \text{ to } 4000M\Omega)$
- LO-Ohms range: 40Ω (.10 Ω to 40Ω) with 2% + 2 count accuracy
- Analog bar graph range: 0 to 100Ω (in low ohms setting)
- · Measures AC/DC voltage up to 600V with 2% + 2 count accuracy • Last reading memory
- 5,000 readings on 4 "C" cell batteries
- · Auto discharge of stray voltages before and after tests
- · Includes 4 "C" cell batteries; (2) each of test probes, alligator clips, and test leads; manual, strap and carrying case
- · Three-year manufacturer's warranty
- Size: 14.0"L x 4.4"W x 8.5"H Weight: 3.8 lbs.

Part No. Model No. Fluke 1520......**\$648.95 \$618.95** 182908

Fluke 189 Multimeter w/ Data Logging

- · Digital and analog bar graph display
- · Backlight with 2 brightness levels
- · Fast auto range
- · AC/DC true rms
- · AC voltage range: 50mV to 3000mV (.001mV to 0.1mV res.); 5V to 1000V (.0001CV to .01V res.)
- · AC current range: 500uA to 5uA (.01uA to .1uA res.); 50mA to 400mA (.001mA to .01mA res.); 5A to 10A (.0001A to .001A res.)
- · DC voltage range: 50mV to 3000mV (.001mV to .1mV resolution); 5V to 1000V (.0001V to .1V resolution)
- · DC current range: 500uA to 5uA (.01uA to .1uA resolution); 50mA to 400mA (.001mA to .01mA resolution); 5A to 10A (.0001A to .001A res.)
- Resistance: 500Ω to $500M\Omega$ (.01 Ω to .1M Ω res.)
- · Capacitance: 1nF to 50mF (.001nF to .01mF res.)
- Freq.: 500Hz to 999.99KHz (.01Hz to .01KHz res.)
- Temperature: -200°C (-328°F) to 1350°C (2462°F)
- · Conductance, diode testing, continuity function capable
- · Data logging: 288 intervals can be stored
- Can save up to 100 readings
- · Lifetime manufacturer's warranty
- Size: 8.0"L x 3.9"W x 2.0"Thick Weight: 2.0 lbs.

Model No. 182043 Fluke 189\$398.95 \$378.95

Refurbished Factory Products Listed in Yellow

Fluke 199R Scopemeter

- · LCD with CCFL backlight (240 pixels x 240 pixels)
- · Bandwidth: 200MHz with 1.7ns rise time
- · Max. real time sample rate: 2.5GS/s
- Inputs and digitizers: 2 plus external trigger/ DMM input
- · Refurbished
- · Independently floating isolated inputs: up to 1000V between inputs, references, and ground
- · Time base range: 5ns/div to 2min./div
- · Input sensitivity: 5mV/div to 100V/div.
- Maximum record length: 27,500 pts./input in ScopeRecord mode; 1,000pts/in out in scope mode
- · Glitch capture: 50nsec (5usec/div to 1min./div)
- · Scope measurements: 7 cursor + 24 automatic
- · True RMS multimeter: 5000 counts, single input
- · Three-year manufacturer's warranty
- Size: 10.1"Lx 6.6"W x 2.5"H · Weight 4.3 lbs.

Part No. Product No. Desc. 182019 FLK199R Refurb. ...\$1999.95 \$1849.95

Fluke 179 Digital Multimeter

- · 6000 count display
- · Auto hold and manual hold
- IEC 1010 rating Cat IV 600V / Cat III 1000V
- · Backlight display
- Temperature measurement is C° and F°
- · AC voltage range: 0.1mV to 1000V (1% of reading + 3 counts)
- · DC voltage range: 0.1mV to 1000V (.09% of reading + 2 counts)
- · AC current range: .01mA to 10A (1.5% of reading + 3 counts)
- DC current range: .01mA to 10A (1% of reading + 3 counts)
- Resistance range: .1 Ω to 50M Ω (0.9% of reading + 1 count)
- · Capacitance range: 1nF to 9999uF (1.2% of reading + 2 counts)
- Frequency range: (voltage input) 2Hz to 100KHz; (current input) 2Hz to 30KHz; (.1% of reading + 1 count)
- Temperature range: -40°C to +400°C (-40°F to +725°F) (1% of reading + 10 counts)
- · Lifetime manufacturer's warranty
- Size: 6.3"L x 3.3"W x 9.2"H · Weight: 1.5 lbs.

Part No. Model No. Description 185535 FLK179 Multimeter\$209.95

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Fluke 73-3 Analog / Digital Multimeter

- · Cat II 600V rating with over voltage protection
- · Automatic touch hold
- · 3200 count digital display with analog bar graph
- · Default auto range mode
- AC voltage range: 40mV to 1000V (2% +2 digits accuracy)
- DC voltage range: 40mV to 600V (0.3% +2 digits accuracy)
- AC current range: 4mA to 10A (2.5% + 2 digits accuracy)
- DC current range: 4mA to 10A (1.5% + 2 digits accuracy)
- Resistance: 400Ω to $32M\Omega(0.5\% + 1)$ digit accuracy)
- · Diode and continuity test
- · Three-year manufacturer's warranty
- Size: 6.6"L x 3.0"W x 1.1"H Weight: 0.8 lbs.

Part No. Model No. 1 **182035** Fluke 73-3**\$134.95 \$129.95**

Fluke 112 Digital Multimeter

- Basic DC accuracy of 0.7%
- 600 count display
- · Backlight display
- · True RMS reading AC voltage range:
- 300mV to 600Vrms (0.1% of reading + 3 counts)
- · DC voltage range: 1mV to 600V
- (0.7% of reading + 2 counts) AC current range: 3A to 10A
- (1.5% of reading + 3 counts) · DC current range:
- .001A to 10A (1.0% of reading + 3 counts)
- Resistance range: 0.1Ω to $40M\Omega$ (0.9% of reading + 1 count)
- Capacitance range: 1nF to 9999uF (1.9% of reading + 2 counts)
- Frequency range: (voltage input) 5Hz to 50KHz; (current input) 50Hz to 5KHz (0.1% of reading + 2 counts)
- · Continuity testing
- · Three-year manufacturer's warranty
- Size: 11.8"L x 7.0"W x 3.0"H Weight: 1.3 lbs.

Part No. Model No. Description **185527** FLK112 Multimeter\$149.95

Fluke 1AC-A VoltAlert™ Meter

The VoltAlertTM AC voltage tester is easy to use - just touch the tip to a control wire, conductor or outlet. When it glows red, you know there's voltage in the line. Electricians, maintenance, service, safety personnel and home owners can quickly test for energized circuits and defective grounds on the factory floor, in the shop or at home. For detecting line voltage from 90VAC to 600VAC.

- · Fits in a shirt pocket for convenience
- · All outer surfaces are nonconductive for safety
- · Detects voltage without metallic contact
- Size: 5.9"L x 0.6"Dia. Weight: 0.1 lbs.
- · One-year manufacturer's warranty

Part No. Model No. Description 164380 FLK-1AC-A1 VoltAlert™..... .\$20.95 \$17.95







776

9 9 9

Protek 3³/4-Digit Multimeter

Two-year

warranty

Now includes

Temperature

Probe!

- · 0.8" digit height
- · RS232C interface
- · True RMS mode
- · 4000 count, auto-ranging with analog bargraph
- · 9999 (10MHz) count frequency counter
- 10 location memory
- Time mode with alarm, clock and stop watch
- MIN., MAX., AVG. and relative mode
- Decibel measurement

 Temperature mode (°C/°F)
- · Backlit display · Two-year warranty
- · Capacitance and inductance measurement
- · Includes test leads, temperature probe, software (3.5" diskettes) and 9V battery
- Size: 7.8"L x 3.3"W x 1.5"H
 Weight: 2.6 lbs.

Part No. Description 3³/₄-digit multimeter\$219.95 \$199.95 123721

JAMECO Infrared Thermometer

- · 0.4" digit height
- · Non-contact temperature range: -10°C to 350°C (14°F to 662°F)
- · Built-in K-type thermometer connector (temperature range): -50°C to 1230°C (recommended P/N 123879 – right)
- · Precision for direct or non-contact temperature measurement
- Non-contact measurement distance: 40"
- 0.1° min. resolution for infrared thermometer
- · Celsius and Fahrenheit display unit by push button
- · Easy readout LCD display
- · Microprocessor circuit assures maximum possible accuracy, special functions and features
- · Records maximum and minimum readings on recall
- Operates on 9V battery (not included) P/N 151095
- · Includes users manual and padded plastic case
- Data hold Auto shut-off Size: 5.0"L x 7.7"H (gun type)
- Weight: 1.9 lbs. One-year warranty Description

Infrared thermometer \$179.95 \$159.95 153584

Infrared Thermometer

Free Belt

Clip

8:1 Spot Ratio

- °F and °C selectable
- · Temperature range: 14°F (-10°C) to 950°F (510°C)
- Accuracy @ 23°C and 0.95 emissivity: +/-2% or +/-3.5°F (whichever is greater)
- 0.95 emissivity provides best accuracy for most surfaces
- · 8:1 distance to spot ratio
- · 0.1 resolution provides increased accuracy of reading
- · Response time: 500msec
- · Maintain reading on display in hard to read areas with display hold button
- · 0.38" character height
- · Includes 9V battery and nylon case
- · Three-year manufacturer's warranty
- Size: 7.8"L x 1.3"W x 2.0"Thick Weight: 0.8 lbs.

Part No. Description 10 1 TPI 373\$139.95 \$125.95

Log on today! www.jameco.com

JAMECO 31/2-Digit Multimeter with Temperature and **Frequency Measurement**

- 31/2-digit LCD (1.0" digit height)
- Measures AC voltage (range: 200mV to 700V) DC voltage (range: 200mV to 100V)
- Measures AC current (range: 200uA to 10A) DC current (range: 200uA to 10A)
- Data hold switch
- Measures resistance (range: 200Ω to $200M\Omega$)
- Measures capacitance (range: 2nF to 20uF)
- Measures frequency (up to 20Khz)
- Measures temperature (range: -20°C to 1000°C)
- · Diode, transistor, and continuity testing
- Includes manual, probes, temperature probe, and 9V battery
- Size: 4.0"W x 2.0"D x 8.0"H · Weight: 1.6 lbs. Part No. Product No.

177480 AEEC2890\$49.95 \$44.95

EXTECH Mini Infrared Thermometer

- °F and °C selectable
- Measures -4°F (-20°C) up to 608°F (320°C) without contact
- Resolution of °1F (17°C) Large backlit display (0.36" digit height)
- Built-in laser pointer for better aim
- · Fixed emissivity to cover 90% of surface applications
- Narrow field of view (distance at 6" measures 1" target) Includes 9V battery Auto data hold
- Size: 5.7"L x 1.6"W Weight: 0.6 lbs.

Part No. Description

10 170421 Mini infrared thermometer....\$99.95 \$89.95

EXTECH Digital Multimeter Temperature Adapter

- · Measures in Centigrade or Fahrenheit
- · Applicable to most digital multimeters with standard two input terminals (works with all Jameco multimeters)
- Set multimeter to mV or VDC range for reading temperature
- Temperature range: 0-2000°F (-18-1090°C)
- Output resolution: 1mV per degree
- Accuracy: ±3% to 233°F (±5% above 233°F)
- · Power supply: 9V battery (included)
- Includes K-type thermocouple, instruction manual and 9V battery • Size: 3.0"L x 2.0"W x 1.0"H
- · Weight: 0.4 lbs. One-year warranty Part No. Description
- 156515 DMM temperature adapter..\$29.95 \$26.95

EXTECH Pocket Thermometer

- · 0.5" digit height
- · Fahrenheit or Celsius
- · Max., min. and hold functions
- Switch for alarm Measurement range: -50°C to

Part No. Description

- +150°C or -58°F TO +302°F Accuracy: ±1° in Celsius and
- ±1.8° in Fahrenheit
- Resolution: 0.1° (-19.9° to +199.9°); 1° (greater than 199.9°) Sensor: 2.5" stainless steel sensing probe
- Size: 2.0"W x 0.4"D x 4.3"H One-year warranty
- Weight: 0.2 lbs. Includes battery

148814 Digital thermometer.....\$29.95 \$26.95

EXTECH Digital Sound **Level Meter**

Auto Range Sound Level Measurements

- Measurement ranges: auto ranging from 40–130dB in A weighted mode; 45–130dB in C weighted mode
 - Accuracy: ±2dB at 94dB sound level
 - Display: 3.5 digit LCD with analog bargraph Resolution: 0.1dB
- Display update rate: 160ms (LDC), 40ms (bargraph)
- Time weighting: fast slow response selectable
- Analog output: AC 0.707Vrms
- Frequency weighting: A and C selectable
- Microphone: electret condenser type
- Includes 9V battery, case and manual Size: 7.1"L x 2.7"W x 1.4"H Weight: 0.7 lbs. Part No. Description

170430 Digital sound meter \$79.95 \$71.95

EXTECH Non-Contact Voltage / Metal Detector

- · Detects metal studs, screws/nails, pipes, and conduits through walls
- Checks fuses, lamps and bulbs, verified polarity, determines Hot/Live/ Neutral wiring configura-
- tions, AC power, DC voltage and continuity Provides audio and visual verification (alarm & LED)
- Size: 5.5"L x 1.1"W x 0.6"H Weight: 0.2 lbs.
- One-year warranty

Part No. Description 154755 Non-contact detector......\$16.95 \$15.29

JAMECO° Digital Light Meter

- · 0.5" digit height
- · Measures in Lux and
- footcandle ranges Range: Lux – 0-50,000 Lux (3 ranges); footcandle – 0-5,000 Fc (3 ranges)
- · Analog output connectors for external recording
- Separate light sensor for optimum location sampling
- instrument 6.4"L x 2.8"W x 1.2"H sensor probe - 3.2"L x 2.2"W x 0.5"H
- Weight: 0.9 lbs. One-year warranty

Part No. Description Digital light meter.....\$99.95 \$89.95 131764

, JAMECO Dual Digital Thermometer and Probe

123861: • 0.4" digit height · Measurement range:

-50°C to 1300°C (-58°F to 1999°F)

- Ambient operating range: 0°C to 50°C (32°F to 122°F) Maximum voltage at thermocouple input:
- 60VDC, 24VAC Resolution: 1°C, 1°F

· For use with any K-type thermocouple as

temperature sensor - recommend P/N 123879 Size: 5.3"L x 2.8"W x 1.2"H • Weight: 0.6 lbs.

One-year warranty • Includes 9V battery 123879: • Type K thermocouple (chrome lead = pos., aluminum lead = neg.) • For use with P/N 123861
• Temp range: -58'F (-50'C) to 392'F (200'C)

123879

- · Welded exposed thermocouple 0.03" diameter

 Length: 3' • Weight: 0.02 lbs. Part No. Description 10 \$62.95 123861 Digital thermometer.....\$69.95 123879 Temperature probe11.95 10.49





20MHz Dual Trace Oscilloscope



- 6" rectangular high resolution blue CRT with internal graticule & scale
- · Vertical deflection: 5mV/div to 5V/div in 10 calibrated steps
- Horizontal deflection: .2µS/div to .2S/div in 19 calibrated steps, 1-2-5 sequence
- Max signal input voltage: 250V (DC and peak AC)
- Power requirements: 98-125VAC @ 1A, 198-225VAC @ 0.5A, 50/60Hz, 45W
- · ADD function measures sum of two signals
- Includes: two 40MHz probes (X1 & X10), power cord, manual, and block diagram
- Size: 16.4"L x 12.6"W x 5.3"H
 Weight: 20.8 lbs.
- · Two-year manufacturer's warranty

Part No. Product No. Description 136098 OS5020 20MHz scope ... \$399.95 \$379.95

20MHz Dual Trace Oscilloscope with 1MHz Function Generator

- Basic specs same as OS5020 (above) plus...
- 1MHz function generator built in (OS5020G)
- Frequency range: 0.1Hz to 1MHz (7 ranges)
- · Output waveform:
- sine, triangle, square, TTL pulse

 Output impedance: 50Ω Output voltage: 14Vp-p

 Power requirements: AC100/120/220/240V 50/60Hz-45W
- Size: 12.6"L x 12.6"W x 6.8"H Weight: 23.8 lbs.
- Two-year manufacturer's warranty

Part No. Product No. Description

94650 OS5020G Func. generator \$499.95 \$469.95

100MHz Oscilloscope

- DC to 100MHz. 2-ch dual trace
- · Signal delay with delay line
- · Auto focusing according to the change of intensity
- · Weight: 22.8 lbs.
- Size: 16.9"L x 12.6"W x 5.5"H

· Two-year manufacturer's warranty Part No. Product No. Description

121179 OS5100 Oscilloscope.....\$899.95 \$849.95

PROBEMASTER 150MHz Oscilloscope Probe

Designed for use with Tektronix, Hewlett Packard oscilloscopes.

- · 3 position switch: 1X, ref, 10X
- · Bandwith @ 3dB: 10MHz (X1); 150MHz (X10)
- Loading: $55/14pf \ 1M\Omega \ (X1); \ 14pf \ 10M\Omega \ (X10)$
- · Low resistance gold contacts · Cord length: 4'4"
- 7 piece kit Weight: 0.2 lbs.

Product No. 4901-02.....**\$42.95 \$38.95 \$34.95** 174473

2MHz Function Generator

- Frequency range: .02Hz to 2MHz
- Waveforms: sine, triangle, square, ramp, TTL pulse, skewed sine
- Variable waveform/duty cycle symmetry
- Linear sweep

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2 Instruments in 1

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- control from 1:1 to 100:1
- DC offset voltage from 0 to ±10V can be superimposed to output waveform
- Output volt.: 20Vp-p (open circuit) 10Vp-p (into 50Ω) Power requirements: 110V/220V 50/60Hz, 20W
- Includes: power cord, BNC to clip cable, fuse

and manual • One-year manufacturer's warranty Size: 10.0"L x 8.0"W x 3.0"H • Weight: 5.4 lbs.

Product No. 10 FG8002.....\$199.95 \$179.95 \$164.95

2MHz Sweep Function Generator with 6-Digit Green LED **Frequency Counter**

- Output impedance: $50\dot{\Omega} \pm 5\%$
- Frequency range: .02Hz to 2MHz in 7 ranges
- Frequency counter range: 2Hz to 50MHz
- Maximum input voltage: 250Vp-p
- Power requirements: 115/230VAC @ 50/60Hz (switch selectable) • One-year warranty
- Includes probe and detachable power cord

Size: 10.3"L x 10.0"W x 3.2"H • Weight: 5.8 lbs.

Part No. Product No. Description 94676 FG7002C Function gen.\$319.95 \$289.95

1.5GHz Frequency Counter

- 9-digit green LED display
- Totalize RPM, period
- Gate time: 0.01s, 0.1s, 1s, 10s
- Input power: AC 110V/220V ±10%, 50/60Hz
- Includes fuse
 - manual and BNC cable · Weight: 5.3 lbs. Size: 10.3"L x 10.0"W x 3.2"H • One-year warranty
 - Channel Frequency Range Resolution 0.2Hz-150MHz $0.1\mu Hz-10kHz$ 0.1µHz-10kHz 50MHz-1.5GHz

Part No. Product No. Description **55790** FC7150 Freq. counter.. .\$279.95 \$251.95

90 Watt Digital and Analog e page 134 for more Benchtop Power Supplies! DC Power Supplies

30VDC @ 3 Amps

- · Output voltage: 0-30V
- · Output current:
- 0-3A Can be used for positive
- or negative source Overload protection circuit
- Constant current and 121152 constant voltage operation
- Power requirements: 100-240VAC @ 50/60Hz
- Size: 5.2"W x 5.6"H x 10.0"D One-year warranty Part No. Product No. Description Wt. (lbs.)

101928 GP4303A Analog DC 10.9 \$179.95 \$159.95 **121152** GP4303D Digital DC 10.7...**199.95 179.95**

JAMECO 31/2-Digit Pocket Multimeter

- · 0.5" digit height
- Measures AC/DC voltage. A DC, hfe and resistance
- DC voltage: 200mV, 2V, 20V, 200V, 1000V
- AC voltage: 200V, 750V
- Resistance: 200Ω , $2k\Omega$, 20kΩ, 200kΩ, 2ΜΩ
- DC current: 200µA, 2mA, 20mA, 200mA, 10A
- Diode test
- · Transistor hfe
- · Includes 9V battery One-year warranty

SALE

- · Removable test leads • Size: 2.6"W x 1.0"D x 4.8"H
- · Weight: 0.5 lbs.
- Part No. Description
- 10

119212 Pocket multimeter...\$17.95 \$15.95 \$14.49

Benchtop Digital Multimeter

- · 41/2 digit display, 5-digit green LED, 19999 count · Vdc basic accuracy
- of 0.05% · Full overload
- protection Frequency
- measurement up to 200kHz
- Continuity check with beeper True RMS in AC range
- · Data hold, diode check, TR hfe measurement available
- · 600V overload protection in resistance range
- DC voltage: 200mV-1000V AC voltage: 200mV-750V
- DC/AC current: 2mA-10A Resistance: 200Ω - $20M\Omega$ • Size: 9.9"L x 9.8"W x 3.6"H • Weight: 6.1 lbs.
- One-vear manufacturer's warranty

Part No. Product No. 132564 DM441.....\$229.95 \$214.95 \$199.95

3³/₄-Digit Multimeter

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CE

- 3¾-digit (0.53" digit height) LCD with analog bar graph
- AC/DC voltage: 750V/1000V
- AC/DC current: 10A • Resistance: $20m\Omega$ - $40M\Omega$
- · Diode/continuity test
- 3200 count Auto range
- Data hold · Auto power off
- · Agency approved: UL/CE

· Weight: 1.5 lbs.

Part No. Product No. Description 101936 DM333



190 Watt Triple Output **Power Supply**

Digital Display

101928

Meter Face

- Output voltage: 0 to +30VDC @ 3A 0 to -30VDC @ 3A +5VDC @ 2A
- · Ripple voltage:
- less than 3mVp-p Volt and current
- meter: LED display (±1% + 1 digit)
- Power requirements: 100VAC-230VAC @ 50/60Hz (jumper selectable) · Overload protection circuit
- · Includes manual and spare fuse
- · Weight: 23 lbs. · One-year warranty

Part No. Product No. Description 157518 GP4303TP Power supply....\$549.95 \$499.95

99.7% Stock



JAMECO Logic Probe

- · Max input
- frequency: 17MHz Minimum pulse width: 30ns
- Input impedance: $1M\Omega$
- Pulse flash time: 500ms
- · Audible tone
- Power supply protection: ±20V
- TTL threshold: (Lo) 0.8V ±0.2V, (Hi) 2.3V ±0.2V
- · CMOS threshold: (Lo) 30% VCC, (Hi) 70% VCC
- Size: 7.7"L x 1.0"W x 0.6"H Weight: 0.4 lbs.

Part No.	Description	1	10	25
149930	Logic probe	\$32.95	\$29.95	\$26.95

JAMECO Logic Pulser



- · Compatible with TTL, DTL, RTL, HTL, HNIL, MO and CMOS ICs • $1M\Omega$ sync input impedance
- "One shot" or continuous 5Hz train pulse
- Pulse repetition rate: 0.5pps/400pps
- Pulse width output at 100mA load: 10µs
- · Pulse mode output current: 10mA
- · Square wave current output: 5mA
- Size: 7.8"L x 1.0"W x 0.6"H Weight: 0.2 lbs. Description 10 Logic pulser......\$19.95 \$17.95 \$15.95 24601

AINES Tone Generator and Inductive Probe

Identify the termination point and/or path of metallic wiring in addition to performing continuity and polarity checks!

- · 3-color LED
- · 2 tracing tones, solid or warble
- · Each uses one standard 9V battery
- · Weight: 0.7 lbs. · One-year warranty Part No. Description

123596 Tone generator/ind. probe \$109.95 \$99.95

High Voltage AC/DC Test Probe

- · Maximum voltages: DC: 40KV, AC: 40KV, 28kVRMS
- Accuracy:
- DC: ±2%, AC: ±3% · Works with a volt-
- meter or multimeters with $10M\Omega$ input impedance and high voltage leads
- Input/output impedance: $1,000M\Omega/1.1M\Omega$
- Cable length: 39" Probe length: 14"
- Weight: 0.8 lbs. · One-year warranty

Description 132290 High voltage test probe\$89.95 \$80.95

ELENCO Telephone Line Analyzer Test Kit

- · Connects between telephone and wall jack
- · Line test: verifies DC voltage to phone
- · Loop test: verifies condition of line from phone company central office to your wall jack
- · Ring test: verifies AC ringing voltage to phone
- Cord test: verifies the condition of your phone cord (if detachable) • Weight: 0.8 lbs.
- Size: 4.4"L x 2.5"W x 1.8"H One-year warranty Part No. Description

119378 Line analyzer kit......\$24.95 \$22.49

JAMECO 60MHz Modular Oscilloscope Probe

- · BNC male connector
- · Hook and pointed probe
- · Alligator clip ground wire
- Max: 600VDC
- 5' cable Weight: 0.2 lbs.
- * with oscilloscope input 30pf

Attenuat	ion	x1	x1	0
Bandwid	lth (1dB)	3MHz	40MHz	
Bandwid	th (3dB)	6MHz	60MHz	
Impedar	ce (R/C)*	1MΩ /180p <i>f</i>	10ΜΩ	/22p <i>f</i>
Part No.	Product No	. 1	10	50
22891	LF101E★	\$20.95	\$18.95	\$16.95

JAMECO° 100MHz Modular Oscilloscope Probe

- · BNC male connector
- · Hook and pointed probe
- Alligator clip ground wire
- 5' cable
- Max: 600VDC
- · Weight: 0.3 lbs.
- ** with oscilloscope input 20pf

Attenuation	x1	x10
Bandwidth (1dB)	3MHz	60MHz
Bandwidth (3dB)	6MHz	100MHz
Impedance (R/C)**	1MΩ /150p <i>f</i>	10MΩ /14p <i>f</i>

Part No.	Product No.	1	10	50
66149	LF210A	\$31.95	\$27.95	\$24.95

JAMECO 250MHz Oscilloscope Probe

- · BNC male connector
- Hook and
- pointed probe Alligator clip ground wire
- · Max: 600VDC
- 5' cable
- · Includes extra probes
- · Weight: 0.3 lbs. with oscilloscope input 20pf

	1 12	
Attenuation	x1	x10
Bandwidth (1dB)	3MHz	150MHz
Bandwidth (3dB)	6MHz	250MHz
Impedance (R/C)***	$1M\Omega/150pf$	10MΩ /14p <i>f</i>

Part No. Product No. LF290**\$41.95 \$37.95** 140687

TRIPLETT Fox and Hound 2 Probe Wire Tracing Set

155141

155133

· Units operate on 9V batteries (not included)

Fox features:

- Generates 3 distinct tones usable for wire tracing
- LED indicator for continuity
- · Line powered in tone mode
- Supplies talk power to a
- handset or telephone
- Size: 3.6"L x 2.4"W x 1.0"H
- Tone output level: +3dBm, 600Ω
- Max. continuity/talk current: 35mA (shorted leads) Hound 2 Probe features:
- · Streamlined case design · Adjustable volume control LED indicator intensifies as signal gets stronger
- Hi-gain & hi-impedance amp
 Mylar cone speaker
 Size: 7.2"Ly 1.4"W (harrel) y 1.9"Dia (speaker)

• Size. 1.2 L X 1.4 W (Dallel) X 1.9 Dia. (Speake	<i>:1)</i>
Carrying Case (P/N 155141): 8.5"L x 6.5"W	

		.,		
Part No.	Description	Wt. (lbs.)	1	10
155133	Wire tracing set	0.6	.\$89.95	\$79.95
155141	Carrying case	0.2	24.95	22.49

mission technology PC-MultiScope 20MHz and 100MHz

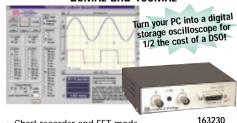


Chart recorder and FFT mode

· Includes parallel port cable, AC adapter, alligator clip probe, Windows® 3.1/95/98 software

· One-year warranty

142834: PC-MultiScope 2

- 20MHz sampling; dual channel
- 1mV to 10V per div.; 10MHz bandwidth; ext. trigger
- Triple power supply; 5VDC @ 500mA and ±0-7VDC @ 150mÅ
- Size: 5.7"L x 6.7"W x 1.8"H Weight: 3.8 lbs.

163230: PC-MultiScope 3, "e-LAB"

- · 100MHz sampling; dual channel
- 5mV to 5V per div.; 20MHz bandwidth; ext. trigger
- 0-4MHz Sine and Square wave signal generator
- Triple power supply; 5VDC @ 500mA and ±0-8VDC @ 250mA

Size: 4.3"L x 5.0"W x 1.5"H • Weight: 3.8 lbs.

Part No. Description

142834 PC MultiScope 2 (20MHz) ..\$349.95 \$319.95 163230 PC MultiScope 3 (100MHz) ..549.95 499.95

Vellemen Digital Storage Scope & Software for PC 32MHz Sampling Rate Includes



- System requirements: IBM 386 or better compatible; 460KB available RAM; math coprocessor required for true RMS and spectrum analyzer; parallel port
- Oscilloscope; two channel; 32MHz sampling rate; 64MHz (only in Windows*) oversampling rate; 10mV to 5V/division; 100ns to 100ms / division; pretrigger display function
- Spectrum analyzer: 0-16MHz frequency range; 32MHz sampling rate; linear or logarithmic time scale; FFT resolution at 2048 lines; FFT ch 1 or ch 2 input
- Transient recorder: 20ms-2000s / div time scale; 9.4 hrs recording time per screen
- · Includes 9VDC transformer, cable, software and user's manual • Weight: 3.1 lbs.
- Size: 9.0"L x 6.5"W x 1.5"H

Part No.	Description 1	10
155504	PC digital scope\$379.95	\$342.95
Part No.	Description	Price

TRIPLETT AC Voltage Detector "Sniffs Out" AC Voltage

Test for the presence of AC voltage on: outlets, circuit breakers, extension cords, light switches, power tools and AC motors



- Non-contact voltage probe AC range: 50V-600V
- Visual and audible alerts Pocket clip · Weight: 0.1 lbs. · Five-year warranty
- Part No. Description

154907 AC voltage detector\$19.95 \$17.95



Alligator Clip Leads (10)

24 AWG wire

144

- Color-coded, 15" long
- · Insulated alligator clip on each end
- 10 per pkg. in assorted colors



Insulated Alligator Clips (2)

- · Color coded
- Jaw opening .375"-0.5"
- · Accepts standard banana connector
- · Insulated barrel
- · Solder strap and pre-drilled hole for 6-32 self threading screw '• Size: 2.3"L x 0.5"W
- Includes one red and one black clip

Part No.	Description 1	10	100	1000
70990	Alligator clips\$.49	\$.39	\$.35	\$.29

Mini-Clip Test Leads (5)

Spring loaded, these miniclips hook easily to IC pins for testing.

 Set of five: red. blue, green, black and yellow • 14" length

· 26 AWG to 300V CSA/UL approved wire

Part No. Description 135298 Mini test leads.\$10.49 \$9.49 \$8.49 \$7.49

Mini Test Clips (2) 114817

- · Sets include one black and one red hooked probe clip
- · Material: plastic

Part No.	Description 1	10	100
114809	1.75" mini test clips\$1.49	\$1.19	\$1.09
114817	3.5" mini test clips1.75	1.39	1.25

19/16" Banana Plugs (2)

- · Set screw connection
- · Standard banana spring plug
- Additional 6-32 threaded hole for additional connection reliability
- Insulating sleeve is threaded to banana plug body
- Includes one red and one black plug (2)
- .1875" lead opening Size: 1.6"L x 0.4"Dia.

Part No.	Description	1	10	100	1000
72194	Banana plugs\$1	.39	\$1.25 \$	1.05	\$.89

2¹/₄" Banana Plugs (2)

- Nine rib spring plugWill accept up to 0.1"
- diameter wire
- · Set screw connection
- Each plug equipped with hole for interconnection Size: 2.3"L x 0.3"W
- · Insulting sleeve fits snugly over copper post
- Includes one red and one black connector
- Part No. Description 137525 Banana plugs......\$2.95 \$2.49 \$2.29

Double Banana Test Leads

· Dual gold plated female banana plugs • Stackable 125217 Part No. Description 10 100 125209 Blk banana connector..\$1.95 \$1.75 \$1.49

Micro Test Clip

125217 Red banana connector...1.95

- · One piece per package
- Material: plastic

Part No. Description 100 1000 153162 1.6" micro test clip \$.75 \$.59 \$.39 \$.29

BNC Test Cable Assemblies



BNC connectors are designed for signal frequencies into the gigahertz range, making them ideal for communications, video and test equipment.

• BNC male • Length: 39"

Part No. Description 11421 ★ To micro hook RG174 \$3.69 \$3.29 \$2.85 \$2.49 11463 ★ To mini hook RG174...3.95 3.49 2.95 2.65

Double-Banana Plug to Alligator Clips **Test Cable**



• 4" lead wire • Length: 3'

Part No. Description 107422 Double-banana plug to alligator clips....\$3.95 \$3.49 \$2.95 \$2.49

Mini Clip to Banana Test Cables

- Available in black or red
- Plunger type action
- Positive connection that won't disconnect from components
- Banana plug connection on opposite end
- Length: 3.5' 20 AWG insulated wire

Part No.	Description	1	10	100
21856	Black test cable	\$3.49	\$2.95	\$2.49
21864	Red test cable	3.49	2.95	2.49

BNC Male Test Cable

Permits BNC assembly to be used as a test cable. Upper connection: two alligator clips red 5.5" 22 AWG wire; black 9" 22 AWG wire.

Lower connection: 23" RG/58U cable with

male BNC connector (UG260/U).

Description 100 1000 Part No. 11383★ BNC cable.......\$3.29 \$2.89 \$2.49 \$2.29

BNC Standard Double Banana Plugs





Permits BNC cables to be used with equipment having banana jacks. Lower connection: BNC upper connection double banana plug on .750" centers. Cross holes .166" diameter in body provide side stack-up connections.

Part No. Description BNC banana plug (F)\$3.49 \$3.19 \$2.69 11439 125225 BNC banana plug (M)3.25

Universal Test Lead Kit

- · Includes (1 pair ea.):
- 3 ft. black/red cables, black/ red 4.5" insulated test probes, 0.8" needle



probes, spade terminals, (2 sets /4 pieces) red/black insulated alligator clips, banana plug Part No. Product No. Wt. (lbs.) 1 0.2......\$6.95 \$6.25 \$4.95 168516 GA5010

Banana to Banana Test Leads (10)

- Stackable
- Color coded 2 each (red, yellow, blue, black, white)
- · 18 AWG wire
- 9.8" long (25cm)
- · 10 per package

Part No.	Description	1	10	25
77841	Test leads	\$20.95	\$18.95	\$16.95

Protected Banana Style Multi-Meter **Test Probes (2)**

- Threaded/pointed test tip
- · Black and red color coded
- 18 AWG wire 42" long (100cm) 2 per package

Part No.	Description	1	10	2
77737	Protected probes	\$5.95	\$5.35	\$4.9

Standard Banana Style Multi-Meter **Test Probes (2)**

- Black and red color coded
- 18 AWG wire 2 per pkg.
- 42" long (100cm)

21864

Part No.	Description	1	10	2!
77745	Banana probes\$	5.95	\$5.35	\$4.9

Stackable Banana Style Multi-Meter **Test Probes (2)**

- Black and red color coded
- 18 AWG wire
- 42" long (100cm) Stackable 2 per package

Part No.	Description		10	25
77770	Stackable probes\$4.	49	\$3.95	\$3.49

Breadboard Pin to Breadboard Pin Test Leads (20)

- · Color coded 4 each (red, yellow, blue, black, white)
- · 20 AWG wire
- 5.9" long (15cm)
- · 20 per package

Part No. Description 77825 Breadboard pin leads \$11.95 \$10.95 \$9.95

Pi Surface Mount Test Clip

Color Coded

- · Can access 0.3mm pitch IC leads
- Stackable side
- by side High reliability:
- gold plated hook and contact · High durability: barrel extension is
- fluorine resin coated Includes 3" ground wire with #8 spade terminal
- Wire length: 3" test clip wires
- Clip/wire color: 2 each of 6 assorted colors: black, red, green, yellow, blue, gray

Part No. Description 170528 SMD nano clips (12)\$109.95 \$99.95





Pomona® Oscilloscope Probe Set

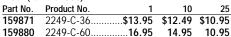
- · Complete accessory kit included
- 48" leads
- Attenuation: X1/X10
- · Bandwidth: 15/100MHz (-3dB)
- · Risetime: 23.33/3.5ns
- Input resistance: $1/10M\Omega$
- Capacitance: 64/10.5pF Ground reference
- Compensation range: NA/10~60pF

Part No.	Product No.	Description	1	10
156451	4550B	Probe kit	.\$49.95	\$44.95

Pomona® BNC Cable Assemblies

- RG58 C/U 50Ω cable
- · BNC male connectors
- · Molded strain relief
- Length: 36" (P/N 159871);





Pomona® Flexible Test Lead Set (2) Right Angle to Straight Banana Plug

· Right angle sheathed banana plug to straight sheathed banana plug on 48" long silicone wire



159871

· For use with most hand held and bench

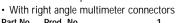
DMM (except Simpson) • Set of 2 leads (black/red)

- · Conforms to IEC1010 standards
- · Rating: 1000 VRMS, 10A, Cat III, P2
- · Conforms to IEC1010 standards

Part No.	Product No.	Description 1	10	25
156460	5907A	Test lead\$10.95	\$9.95	\$8.95

Pomona® Replacement Test Lead Set (2)

- Set of two PVC 48" long insulated leads (black/red)
- · Fits most meters from Fluke, HP, Tektronix, Wavetek and Amprobe



Part No.	Prod. No.	1	10	25
155951	5519A \$1 1	1.95	\$10.95	\$9.95

Pomona® Basic Electronic DMM Test Lead Kit (2)

Kit contains 2 each (black/red):

· Test probes with silicone insulated leads (banana plugs on meter end have no sleeve)



- · Slide-on extended tips & alligator clips
- Supplied in a reusable plastic case 48" leads
- · Fits most multimeters and other equipment with banana jacks

Part No.	Prod. No.	Description	1	10	25
155942	5672A	Test lead kit	\$22.95	\$19.95	\$19.49

Pomona® Solderless Banana Plugs (2)



- Nickel plated · Set screws secure leads
- ABS insulation 5000VDC @ 15A 50°C max.
- · Color: (1) red; (1) black per pack

159863: Solderless with safety collar & set screw

159855: Solderless with set screw

159927: Double banana plug with wire guide

Part No.	Product No.	1	10	25
159863	1825-02	 \$2.95	\$2.49	\$2.25
159855	1325-02	 2.95	2.49	2.25
159927	MDP-02	 4.95	4.49	3.95

Pomona® BNC Male to Double Stacking Banana Plug

· Rating: 500VRMS max., +50°C (+122°F) max.

F	Part No.	Prod.No.	Description	1	10
•	176989	1270	BNC/banana plug\$8.9	95	\$8.49

Pomona® Test Lead Holders

155985:

• Max cable dia.: 0.450" • 11"L • Color: blue

155977:

155969 1508

• Max cable dia.: 0.320"

• 11"L • Color: black

155969: • Max cable dia.: 0.210" • 11"L • Color: orange Part No. Product No. No. of Slots 1 9.....\$6.95 \$6.25 \$5.59 155985 2708B **155977** 4408 10**6.95** 6.25

155985

Pomona® Minigrabber® Test Clip Cord Kits (10)

14**6.9**5

· Kit contains 10 pcs. one each of 10 colors: black, brown, red, orange, yellow, green, blue, violet, gray and white

24" leads

Part No. Prod.No. Description **156494** 5523 Mini. patch cord\$34.95 \$31.49 **156507** 5521 SMD Mini. cord**59.95 53.95**

Pomona® BNC Male w/ Molded Strain Relief to Minigrabber® Test Clips

- RG 174/U, .100" 0.D.
- · Rating: 300 VRMS max., +50°C (+122°F) max.
- BNC connector: Body: brass,
- tarnish resistant plating; Dieletric: PTFE; Center contact: gold plated brass

· Strain relief: PVC molded directly to connector

· Length: 36"

Part No. Prod.No. Description **176954** 5187-K-36 Minigrabber®**\$19.95**

Pomona® Stackable Banana **Test Lead Cables**



• 5000V @ 15A • 55°C max.

159898: 36" leads (2) mini w/ banana

· 45VAC @ 5A max.; beryllium copper contact and glass filled insulation

159901: 24" leads (2) 159919: 36" leads (2)

Part No.	Product No.	Description	1	10	25
159898	3782-36	Mini w/ banana \$7.9	95	\$6.95	\$6.25
159901	B-24-02	Patch cord8.9	95	7.95	6.95
159919	B-36-02	Patch cord9.9	95	8.95	7.95

Pomona® BNC Male w/ Molded Strain Relief to Minigator® Test Clips

- RG 50C/U, .195" O.D.
- · Rating: 45 VRMS max., +50°C (+122°F) max.
- · Jaws open to .187" max.
- BNC connector:

Body: brass, tarnish resistant plating; Dieletric: PTFE; Center contact: gold plated brass

- · Strain relief: PVC molded directly to connector
- Length: 36"

4.95

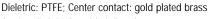
156494

156507

Part No. Prod.No. Description 176971 4532-C-36 BNC/minigator®...\$14.79 \$13.49

Pomona® BNC Male w/ Molded Strain Relief to SMD Grabber® Test Clips

- RG 174/U, .100" O.D.
- · Rating: 150 VRMS max., +50°C (+122°F)
- BNC connector: Body: brass, tarnish resistant plating;



· Strain relief: PVC molded directly to connector

· Length: 36"

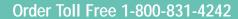
Part No. Prod.No. 176946 5304-K-36 SMD grabber ...\$20.49 \$18.95

Pomona® Double Banana Plug to Minigator® Test Clips

- RG 58C/U
- Rating: 45 VRMS, +50°C (+122°F) max.
- · Jaws open to .187" max.
- · Length: 36"

Part No. Prod.No. Description 176962 2BC-MG-36 Banana/minigator \$19.95 \$17.95







146 Test and Measurement Accessories

Pomona® BNC Male with Binding Post



· Rating: 500VRMS max.,

176920 +115°C (+239°F) max.

Part No.	Prod.No.	Description 1	10
176920	3430-0	Black binding post\$5.39	\$4.95
176938	3430-2	Red binding post5.39	4.95

Pomona® Micrograbber® Test Clip Patch Cord Kit







• 20 AWG wire, .087" O.D.

• Rating: 150V, 3 amps, +102°C (+216°F) Max.

Part No.	Prod.No.	Description	1	10
176911	5525	Micrograbber® kit\$4	9.95	\$44.95

Pomona® Binding Post with **Double Mounting Base**

· Accepts standard banana plugs

· One black and one red binding post

· Material:

Binding post: bright tin plated brass; Insulation: polycarbonate

• Rating: 2500VDC, 15 amps, +115°C (+239°F) max.

Part No.	Prod.No.	Description 1	10
177025	4243-0	Black binding post\$4.95	\$4.49
177033	4243-2	Red binding post4.95	4.49

Pomona® **BNC Female to Stacking Binding Post**



· Rating: 500VRMS max., +50°C (+122°F) max.

Part No.	Prod.No.	Description 1	10
176997	1452	BNC/binding post\$8.95	\$8.49

Pomona® Binding Posts

· Panel mount binding post

· 5-way post also fits non-shrouded banana plugs



Part No. Prod. No. Description Black..... \$3.95 \$3.49 \$2.95 **166393** 3750-0 **166406** 3750-2 Red3.95 3.49 2.95

Double Binding Posts Dual Banana

- · Red/Black design
- · Screw-mount
- 0.72" between posts
- Size: 1.6"L x 1.4"W
- · Weight: 0.04 lbs.

Part No. Description 125196 Screw mount bind post .. \$2.49 \$1.95 \$1.75

Pomona® Double Banana Plug with Wire Guide

177009

- Set screws secure leads
- · Simplifies cable construction or component mounting
- · Accepts cables to .215"Dia. max.
- · Material: Banana plug/jack: brass; Spring: heat treated beryllium copper; Finish: nickel plated
- · Rating: 5000VDC, 15 amps, +50°C (+122°F)
- Standard banana plug .210"Dia.,

banan	a jack .166	5"Dia. 1770	17
Part No.	Prod.No.	Description 1	10
177009	4892-0	Black banana plug\$4.49	\$3.95
177017	4892-2	Red banana plug4.49	3.95

PROBEMASTER Micro-tip Probe Test Leads

- · 23K gold tips
- Silicon wire 1000V rated
- · Length: 3'3"
- · Color: red and black
- · Soft, comfortable handle
- · Spring loaded micro tip
- Includes (8) plunger type tips Weight: 0.2 lbs.

Part No. Description 174625 Micro tip test leads..\$29.95 \$26.95 \$23.95

PROBEMASTER 150MHz Oscilloscope Probe

Designed for use with Tektronix, Hewlett Packard oscilloscopes.



- Bandwith @ 3db: 10MHz (X1); 150MHz (X10)
- Loading: 55/14pf $1Meg\Omega$ (X1); 14pf $10Meg\Omega$ (X10)
- · Low resistance gold contacts · Cord length: 4'4"

 Weight: 0.2 lbs. 7 piece kit

Part No.	Product No.	1	10	50
174473	4901-02	\$42.95	\$38.95	\$34.95

Single Binding Posts to BNC Male

- · Adapts BNC female connector to single binding post/ banana plug
- Binding post with captive thumb nut
- · Accepts standard banana plugs
- · Operating voltage: 500 VRMS Brass nickel plated

Size: 1.4"L x 0.6"Dia.

Part No. Description 10 Black binding post......\$1.95 \$1.49 100618 Red binding post1.95

Double Binding Posts – Dual Banana

Red/Black design

PNC to double binding post

• BINC 10	double billuling post		20200
Part No.	Description 1	10	100
125233 99354	BNC-female bind post\$2.95 BNC-male bind post3.25		

1" Screw Type Binding Posts (2)

- 0.16" hole for banana test leads
- · Chassis mount with lock washer and nut
- Solder tab hole: 0.06" diameter
- · Requires 0.32" mounting hole
- · For both wire and standard banana
- · Includes one red and one black insulated post
- Size: 1.0"L x 0.5"Dia. Weight: 0.04 lbs.

Part No. Description 71239 Binding posts (2) .. \$.99 \$.85 \$.69 \$.59

1.75" Screw Solder Binding Posts (2)

- 0.16" hole for banana test leads
- · Chassis mounting
- Solder post: 0.0625" diameter
- · For both wire and standard banana
- · Includes one red and one black insulated post
- Size: 1.8"L x 0.5"Dia. Weight: 0.04 lbs.

Description Binding posts (2) \$1.09 \$.95 \$.79 \$.69 77690

EXTECH Hygrometer/Thermometer

With Clock and Calendar

- · Flip-type
- · Push-button switch for setting time/year, alarm, calendar, Celsius/ Fahrenheit, up and down key
- Temperature range: -10°C (+14°F) to 60°C (140°F)
- Temperature accuracy: ±3°
- · Humidity range: 2 to 90%
- Calendar range: 1-1-96 to 12-31-2050
- Alarm snooze: every 4 minutes Includes battery
- Display LCD (.48"H digit) LCD size: 2.5"W x 1.7"H
- Size: 3.5" square x 1.0"D Weight: 0.3 lbs.

Part No. Description 148806 Hygro-thermometer\$29.95 \$26.95

EXTECH Clock, Thermometer, and Hygrometer

- · Measures time, atmosphere humidity and temperature
- Requires one AA battery (not included) P/N 151087 (pg 82)
- Size: 8.4"Dia. x 1.2"Thick
- · Weight: 1.0 lb. · One-year warranty

Part No. Description .\$39.95 \$35.95 155774 Extech clock

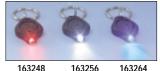
Photon Micro-Lights® Keychain With New Switch for Continuous Light

 Shines astonishingly bright

100600

- · Lights any path · Micro size
- (same weight as a quarter)

163264



· Visible for more than a mile

· Lifetime warranty · Lithium battery included

Part No. Description Red Micro-Light® keychain \$17.95 163248 \$15.95 White Micro-Light® keychain 17.95 163256 15.95

Blue Micro-Light® keychain..17.95 15.95



Protek ISA Digital Oscilloscope Card for Windows® 95

Dual Channel

- 2 inputs per card (BNC connectors)
- · Sample rate per channel: 20MS/s
- · Resolution: 8 bits
- Amplitude: max. 300V + pk
- · Auto setup: 30Hz to 2MHz, 35V p-p max.
- Impedance: $1M\Omega$ 25pF · External trigger coupling: AC
- Trigger levels: ±3 div Trigger type: analog
- Time range: 50ns/div to 0.5s/div 1-2-5 22 step
- Input range: 50mV/div to 5V/div 1-2-5 7 step
- System requirements: IBM PC 486, Pentium® or compatible; 8MB of RAM (16MB recommended); VGA graphics card and monitor; 10MB of free hard disk space; (1) 8-bit ISA slot • One-year warranty
- Includes CD-ROM software, driver, manual and probes
- Size: 7.2"L x 3.6"W

· Weight: 0.8 lbs.

Part No. Description 153568 Oscilloscope card\$249.95 \$224.95

Quicktech '98 **ULTRAX** Diagnostic Software

Self-booting software for 386, 486 and Pentium®/II/ MMX/III/AMD Athlon

 Verify proper operation and troubleshoot failures of all major PC components: hard drives (MFM, RLL, IDE. SCSI): floppy



drives; base, extended and external cache RAM; VGA/EGA/VESA - compliant video cards; keyboard; monitor; printer; and I/O ports

- · 48 hour burn-in mode for lengthy testing
- Floppy drive head cleaning function Wt.: 0.5 lbs.
- · Includes loopback testers for DE9 and DB25 serial and DB25 parallel ports, manual and 3.5" disk

Part No. Description 134826 QuickTech '98 software \$129.95 \$116.95

FOREFRONT Troubleshooter Software

The troubleshooter is a self-booting program with its own operating system that bypasses DOS for accurate hardware component testing. Isolates hardware problems from operating system problems.



- · Printed test report record
- · Comprehensive tests of on-board and peripheral hardware • PC/XT/AT and compatible computers
- 99+ hours burn-in and soak testing Wt.: 0.9 lbs.
- Low-level formats IDE drives One-year warranty Part No. Description

126130 Troubleshooter software ...\$199.95 \$179.95

Universal EPROM Programmer Parallel Port Interface

System requirements: IBM compatible PC; 8MB RAM; 6MB hard disk space; DOS version 5.0 or higher; Windows® 9X/NT4; parallel port in SPP or

or PS/2 mouse



- Input voltage: 15VAC or 8 AA batteries (not included)
- · Programs 8 and 16 bit EPROM, paged EPROM, parallel and serial EEPROM, serial EPROM, NVRAM, BPROMS, PAL, GAL, PEEL, PALCE, EPLD, and over 400 microcontrollers
- · Package supports up to 48-pin DIPS
- Full support for 1.8V, 2.7V, 3.3V, and 5V devices
- Supports Intel Hex, Motorola S-record, Hex auto recognition TekHex, Extended TekHex, ASCII, Raw Binary, Octal, MOSTech, Altera POF, Altera · Weight: 4.9 lbs. JAM and other file formats
- Device operations: file, load, edit, save, read device, device checksum, verify data, verify signature, blank check, bit test, device erase, over-program
- Built-in IC tester for 7400/4000 series, SRAM & DRAM
- · Includes 6 foot parallel cable, 15VAC adapter, installation guide, programmer, CD-Rom software, and • Size: 9.6"L x 6.2"W x 2.4"H 3.5" drivers

Part No. Description

173294 Universal EPROM Prog. \$999.95 \$939.95

BK PRECISION Parallel Port 16KB - 32MB Universal IC **Programmer and Tester**

System requirements: IBM PC/XT/AT/386/486/ Pentium®, DOS or Windows® 95/98 and open parallel port Programs serial

(E)PROM, EPLD, GAL, PEEL, microcontrollers and Flash PROM Auto search device select functions supports

E(E)PROM and Flash memory

- Auto configures for host parallel port
- Supports JDEC, Intel Hex, Motorola S Records, Binary Tektronix Protocol and ASCII file formats
- 1500 plus device library
- Device functions: blank check, read program, verify, checksum and encryption
- Buffer features: clear, edit, fill, file load, file and file save • 48-pin universal ZIF socket
- Programming algorithms: normal, intelligent, quick pulse and flash programming
- Includes power supply, manual, 3.5" disk, IC module and cable
- Size: 8.8"L x 5.8"W x 1.5"H Weight: 4.6 lbs.

Part No. Model/Product No. 163184 BK846 programmer...... .\$599.95 \$549.95

FOREFRONT POSTPlus Solution Card

Provides real solutions to the problems caused by PC/File Server hardware failures. Three digit display

provides solution codes. Because of the on-board processor, it works even if the PC system or other POST code readers will not.

· Includes card, probe and user manual Size: 7.0"L x 1.5"W x 9.5"H (package)

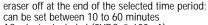
Weight: 1.0 lb.
 One-year warranty

Part No. Description 141356 PostPlus diagnostic card ..\$329.95 \$299.95

HI-LO SYSTEMS EPROM Eraser

- Erases all UV erasable EPROMs Holds a total of 16 pieces of
- 32-pin EPROMs Has an upper and a lower chamber for
- erasing

Includes a variable timer which turns



- AC adapter included (9VDC @ 600mA)
- Special conductive foam liner eliminates static build-up
- Size: 8.5"L x 2.8"W x 2.8"H Weight: 1.6 lbs.

· One-year warranty

Part No. Description 121267 EPROM eraser\$149.95 \$134.95

EPROM Erasers and Accessories

66042:

- · Erases all EPROMs
- · Erases 1 chip in 7 minutes
- Special conductive foam liner eliminates static build-up



Battery operated. Four AA batteries required (not included). Recommended P/N 32627 (see below)

UV intensity: 6.5mW/cm²

- Size: 6.8"L x 1.5"W x 2.3"H Weight: 0.8 lbs.
- One-year manufacturer's warranty

15712:

- · Erases all **EPROMs**
- · Erases 1 chip in 15 min.
- · Erases 8 chips in 21 minutes
- Maintains constant exposure distance of 1"
- Special conductive foam liner eliminates static build-up
- Built-in safety lock to prevent UV exposure
- Complete with holding tray for 8 chips
- UV intensity: 6.8mW/cm² One-year warranty
- Size: 9.0"L x 3.7"W x 2.6"H
 Weight: 2.3 lbs.

Part No. Description 10

66042 Portable EPROM eraser \$59.95 \$53.95 \$48.95 15712 8-chip EPROM eraser 129.95 117.95 106.95 Part No. Accessories Price 34382 Replacement lamp for 15712\$34.95





512K-Two Socket E(E)PROM Programmer

A compact unit that operates in two modes: STAND ALONE MODE", which allows you to use it as a portable unit or in "REMOTE CONTROL MODE", which uses software to interface with your printer port.

- Programs EPROMs up to 25V, Flash EPROMs 5V and 12V, EEPROMs, and SRAMs
- 2 sockets for master/ slave operation
- For stand alone mode use 1-2 (9V) batteries (not incl.), P/N 151095 (pg 82) or 12VDC @ 500mA adapter (incl.)



Stand alone mode - Functions Set - Blank check - IC Type select - Program

Remote control mode - Type - Read - Program - Verify - Disk - Help

- Process - Parameter

- Verify and check sum

- · Includes manual, cable and 3.5" disk
- Size: 6.4"L x 4.3"W x 2.2"H
- · Weight: 2.1 lbs. · One-year warranty

EPROM writer.....\$269.95 \$239.95 130155

HI-LO SYSTEMS Parallel Port 64KB-8MB IC Programmer/Tester

Parallel Port Interface or Stand Alone Unit

- System requirements: Pentium® PC or compatible; 3.5" floppy drive; parallel port in ECP/EPP mode; Windows® 95/98/2000/NT
- · Can also be used as a stand alone unit
- 32-pin single ZIF socket
- · Base unit has an LCD that displays programming status on a 16 x 2 character, and function keys allowing the base unit to be used as a stand alone unit
- Base unit has 2M bits of built-in memory
- · Uses replaceable packs for different IC packages
- By selecting the appropriate pack, the base unit can be made to support a wide range of devices
- Can program 5V/3/3V devices
- Has the ability to "auto sense" automatically detects the presence of an IC in the socket to begin programming
- · Has a current limiter circuit to prevent the unit from electrical damage
- Verifies the ID code of a device in order to protect the IC from electrical damage
- Up to 8 different IC programming configurations can be stored in the base unit Weight: 2.9 lbs.
- Includes cable, 3.5" software, and 12VDC@1.25A power supply
 Size: 6.5"L x 4.8"W x 2.0"H

Part No. Description 185519

Price

PRO-208 programmer.....\$549.95

16-Bit Active Slot PC **Extension Interface**

Gives you three additional expansion slots with the advantages that external slots provide including the protection and convenience



- higher compatibles Supports following cards: MONO/EGA/VGA/FDC/ HDC, game, and most I/O • Control card installs inside your case with four external slots on the outside
- Two mounting brackets to interface the unit via 37 and 62-pin cables
- Isolates system providing short circuit protection
- Compatible with 8 or 16-bit cards
- Can be powered off the PC or externally using 6-pin connection (P/N 78318 & P/N 78326, pg 63)
- Replacement fuse: 250V-2A (P/N 103915, pg 83)
- · Can insert and remove cards while power on
- · Power indicator LEDs for each voltage
- Size: 9.5"L x 6.8"W x 1.0"H Weight: 5.5 lbs.
- · One-year warranty

Part No. Description

\$225.95 131238 PC slot extender unit\$249.95

Linear IC Tester

Identify and test op amps, comparators, optocouplers, transistor arrays, analog switches and voltage regulators.

- · Tests 14 to 24-pin devices
- · Auto feature lists type and device number
- Display: 16 x 1 character LCD dot matrix
- Uses (2) 9V batteries or 9V DC adapter (included)
- Size: 6.4"L x 4.4"W x 1.8"H
- Weight: 1.7 lbs. One-year warranty

Description

130147 Linear IC tester.....\$599.95 \$569.95

HI-LO SYSTEMS Serial Port 16KB-8MB Universal IC Programmer/Tester

Serial Port Interface

- · 40-pin universal ZIF socket
- Programs PROMs, EPROMs, EEPROMs, flash memory, serial PROMs, BPROMs, DSP, microcontrollers, PLD/CPLD/FPGA, PALs, GALs, PEEL, and EPLD
- · Programs single devices only
- · Load file, read master, program, verify, auto, id check, checksum, blank check, erase, secure, protect/unprotect, edit, file transfer, function configuration, self-test functions
- Supports popular file formats including Intel HEX, Motorola S-records, binary, JEDEC fuse map, Altera POF and others · One-year warranty
- · Includes programmer, serial cable, software, user's manual, and table top power supply w/ 6' power cord
- System requirements: 486 Pentium® and IBM higher compatible, 4MB of extended memory, serial port, 5MB of free disk space, Windows® 3.1/95/98 operating system and 3.5" floppy disk drive
- Size: 8.8"L x 6.3"W x 1.8"H
 Weight: 5.4 lbs.

Description Serial univ. prog./tester ... \$899.95 \$799.95 168348

Reader Technology 1 Socket 1MB and 8MB **EPROM Programmers**

RS232 Interface

Specifications:

- Operating voltage: 115 VAC
- Interface: RS232
- ZIF socket
- Power consumption: 8VA
- Connector: DB25 (female)
- Will work with any serial communication software such as Procomm Plus
- Motorola s1f, s2f and s3f can convert to binary or ASCII prior to download

Can be operated from any host system equipped with an RS232 interface!

82384

- Baud rate configurable per one digit commands (no faster than 19,200 bps)
- Data bits: 8 Start/Stop bits: 1
- Parity: none, even, odd, default none
- Data formats: Motorola s1f, s2f, s3f
- Flow control: none, RTS/CTS, XON/XOFF, Default RTS/CTS
- Size: 6.5"L x 4.0"W x 2.3"H
- · One-year warranty

82384:

- Programs all current EPROMs up to 512Kbits and the Intel 27CO11 (1Mbits): 2716-27512: 2804-8256; also 27CXXX and 28CXXX series
- Selectable VPP from 5V-25V
- Maximum pins: 28 Weight: 2.4 lbs. 81699:
- The command line interpreter enables the user to enter one or more single character commands at once
- Programs EPROMs up to 8Mbits: 2716-27080; 2804-28256; also 27CXXX and 28CXXX series Maximum pins: 32 • Weight: 3.0 lbs.

Description Part No. 82384 1Mbits EPROM prog.\$209.95 \$190.95 81699 8Mbits EPROM prog.239.95

HI-LO SYSTEMS Parallel Port 16KB-8MB Universal IC Programmer/Tester

Parallel Port Interface

- · 40-pin universal ZIF socket
- Programs PROMs, EPROMs, EEPROMs, Flash memories, bipolar PROMs, PALs, PLDs, GALs & MPUs
- Functional testing of 7400, CD4000, CD4500, series logic devices and DRAM and SRAM memory



Optional adapters available additional adapters may be special ordered

- · Electronic device identification for TTL
- · Programs 16Kbits to 8Mbits EPROMs
- Includes: programmer, cable, menu-driven software and user's manual
- System requirements: 286/386/486/Pentium® or compatible PC; 2MB memory, 3.5" floppy disk drive, MS-DOS version 3.3 or later. Hard disk drive
- Cable length: 3.3' Color: gray One-year warranty
- Size: 11.2"L x 9.6"W x 2.4"H · Weight: 8.6 lbs.

Part No. Description 137023 Parallel univ. prog./tester..\$849.95 \$779.95

HI-LO SYSTEMS 1 Socket 16KB-8MB Universal IC Programmer/Tester

With Interface Card and Cable



- · Programs PROMs, EPROMs, EEPROMs, Flash memories, Bipolar PROMs, PALs, PLDs, GALs & MPUs
- Functional testing of 7400, CD4000, CD4500, series logic devices and DRAM and SRAM memory
- Electronic device identification for TTL
- · Programs 16Kbits to 8Mbits EPROMs
- Includes On-Off switch to increase the life of the unit. (Programmer is not automatically turned on every time the computer is powered up. This prevents unnecessary wear of the unit.)
- Anti-static pad on the unit provides a convenient place to put ICs while you work with them
- 40-pin universal ZIF socket Maximum pins: 40
- Programming speeds/algorithms: normal, intelligent, interactive, quick pulse, and flashrite
- Manufacturer and part number selection to ensure correct programming method
- File formats supported: Intel Hex, Motorola S Hex, Tektronix Hex, JEDEC and binary
- Address available: 278, 378, 3BC
- 2 & 4-way binary file splitting and shuffler programs
- · Full screen buffer editor
- · Includes: programmer, PC interface card, cable, menu-driven software and user's manual
- · System requirements: PC/XT/AT/386/486 or compatible PC; maximum clock speed 50MHz, turbo mode; minimum 640Kbits memory, minimum one 3.5" floppy disk drive, MS-DOS version 3.0 or later. Hard disk drive recommended
- Cable length: 3.3' Color: gray Weight: 7.6 lbs.
- Size: 11.3"L x 9.8"W x 2.5"H · One-year warranty

Description Part No. Price Univ. IC prog./tester.....\$699.95 104651



, JAMECO ATX 250/300 Watt Power Supplies w/ Power Switch



Compatible w/ P/N 140038 (for 152194) and P/N 153066 (for 155539) cases (see page 169)

- 152194 Output: +3.3V @ 14A, +5V @ 25A, -5V @ 0.5A (250 Watt) +5VSB @ 1.5A, +12V @ 10A, -12V @ 0.5A
- 155539 Output: +3.3V @ 14A, +5V @ 30A, -5V @ 0.5A (300 Watt) +5VSB @ 1.5A, +12V @ 8A, -12V @ 0.5A
- Input: 115-230VAC @ 50-60Hz (switchable)
- 20-pin ATX connector Power on/off switch
- UL/CSA/TUV approved Built-in fan
- Includes detachable power cord
 One-year warranty **152194**: • Size: 6.0"L x 5.5"W x 3.4"H • Wt.: 3.5 lbs. 155539: • Size: 5.9"L x 5.5"W x 3.4"H • Wt.: 3.7 lbs.
- · AMD Athlon approved

Part No. Product No. Description 10 152194 JE2031 250 watt ...\$59.95 \$53.95 \$48.49 155539 JE2033 300 watt 79.95 71.95 64.95

JAMECO ATX Compatible 250/300 Watt Power Supplies



- 152514 Output: +3.3V @ 15A, +5V @ 26A, -5V @ 0.5A +5VSB@ 1A, +12V@ 9A, -12V@0.5A
- 155811 Output: +3.3V @ 14A, +5V @ 25A, -5V @ 0.5A +5VSB @ 0.8A, +12V @ 12A, -12V @ 0.5A (300 Watt)
- Input: 115-230V @ 50-60 (switchable)
- · 20-pin ATX connector
- Built-in fan
 UL/CSA/TUV approved
- · Includes detachable power cord · One-year warranty
- Size: P/N 152514 5.5"L x 5.9"W x 3.4"H Wt.: 3.3 lbs. P/N 155811 - 5.9"L x 5.5"W x 3.2"H • Wt.: 4.1 lbs. 10

Part No. Product No. Description 250 watt..**\$59.95 \$53.95 \$48.95 152514** JE8250 155811 JE5300 300 watt... 79.95 71.95 64.95

AT Compatible 200 Watt Power Supply



- Output: 5V @ 20A, 12V@8A, -5V @ 0.5A, -12V@0.5A
- · Input voltage: 115/230V @50/60Hz (switchable)
- · AT compatible connectors
- Built-in fan CSA/CE/TUV approved
- · Includes detachable power cord
- Size: 6.0"L x 4.6"W x 3.4"H Weight: 2.6 lbs.

Part No. Product No. Description **172822** AA-230 200 watt ..\$42.95 \$38.49 \$34.95

JAMECO PC/XT/AT Compatible 150/200 Watt Power Supplies





19465

Compat. w/ JE2023 and JE2021 (previous models)

- 19465 Output: +5V @ 15A, -5V @ 0.5A, (150 Watt) +12V @ 5.5A, -12V @ 0.5A
- 67467 Output: +5V @ 20A. -12V @ 0.5A (200 Watt) +12V@ 8A,
- Input: 110-220VAC @ 47-63Hz (switchable)
- PC/XT/AT compatible connectors Built-in fan
- Size: 9.5"L x 5.5"W x 4.6"H · One-year warranty
- Includes detachable power cord
- P/N 19465: Weight: 4.7 lbs.
- P/N 67467: UL/CSA approved Weight: 4.3 lbs. Part No. Product No. Description 150 watt...\$59.95 \$53.95 \$48.49 19465 67467 JE1030A 200 watt....64.95 59.95 54.95

TRIMAG AT Compatible 200 Watt Power Supply

- · Output:
 - +5V @ 19.8A,
 - -5V @ 300mA,
 - +12V @ 7.3A,
 - -12V @ 300mA
- · Built-in fan
- · PC/XT/AT compatible connectors
- Input voltage: 115VAC-240VAC @47-63Hz (switchable)
- · Includes detachable power cord
- Size: 8.7"L x 5.6"W x 4.7"H Weight: 5.5 lbs.

Part No. Prod. No. Description 177535 BM5200 200 watt\$54.95 \$49.95 \$45.95

JAMECO AT Compatible 250 Watt Power Supply





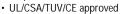
Compatible with JE2012, JE2020, JE2030A and JE2032 cases (previous models)

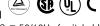
- +5V @ 20A. -5V @ 0.5A +12V @ 10A, -12V @ 0.5A
- · Fits in popular mini-vertical and desktop cases
- Input: 110-220VAC @ 50-67Hz (switchable)
- · AT compatible connectors · Built-in fan
- · Easy to install One-year warranty
- Size: 5.5"L x 5.9"W x 3.4"H
- · Includes detachable power cord
- · Weight: 2.0 lbs. · UL, CSA, TUV, CE approved

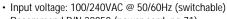
Part No. Product No. Description 174465 LC250C 250 watt ..\$49.95 \$44.95 \$39.95

JAMECO ATX 200W Power Supply

- · Output voltage:
- +3.3V @ 14A,
 - +5V @ 20A,
- +12V @ 8A. -5V @ 0.5A,
- -12V @ 0.8A
- · Built-in fan
- · 20-pin ATX form factor







- · Recommend P/N 38050 (power cord, pg 71)
- Size: 6.0"L x 5.5"W x 4.4"H · Weight: 2.8 lbs.

Part No.	Product No.	1	10	25
174035	JE2130	\$54.95	\$49.95	\$45.95

JAMECO AT Compatible 300 Watt Power Supply with 3.3V Regulator

Compatible with JE2012, JE2020, JE2030A and JE2032 cases (previous models)



- +12V @ 10A, -12V @ 1A
- · 3.3V regulated power connectors to motherboard
- · Fits in popular mini-vertical & desktop cases (pg 169)
- Input voltage: 110/220VAC @ 50/60Hz (switchable)
- AT compatible connectors Built-in fan
- UL/CSA/TUV approved · One-year warranty
- Includes detachable power cord
- Size: 5.5"L x 5.9"W x 3.4"H
 Weight: 4.7 lbs.

Part No. Prod. No. Description 10 132185 JE1035 300 watt\$99.95 \$89.95 \$80.95

ASTEC AT Compatible 200 Watt Power Supply



Compatible with JE2012, JE2020, JE2030A and JE2032 cases (previous models)

- +5V @ 23A, · Output: -5V @ 0.5A. +12V @ 8.0A, -12V @ 0.5A
- Fits in popular mini-vertical and desktop cases
- Input: 110-220VAC @ 50-67Hz (switchable)
- · AT compatible connectors · Built-in fan
- · Easy to install One-year warranty
- Size: 5.5"L x 5.9"W x 3.4"H Mfg #: SA201-3450
- · Weight: 3.2 lbs.

Part No. Product No. Desc. **19529** JE1034 200 watt..\$39.95 \$35.95 \$32.95

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JAMECO USB PCI Input/Output Card

USB-A Connector - 2 USB Ports

- Uses VIA VT83C572 controller chip
- · Dual USB-A female ports
- · USB specification V.1.0 compatible
- · Plug and Play compatible
- USB legacy BIOS supports
- · Operates in USB-aware operating system (Win® 95, Win® 98)
- Includes user manual Size: 4.7"L x 2.0"W

155299

· One year warranty

· Weight: 0.3 lbs. Part No. Description 1

IAMECO PCI to USB I/O Card

PCI USB card\$29.95 \$26.95 \$23.95

USB-A Female Quad Port

 System requirements: 486DX2-66 processor or higher (Pentium® processor recommended); available PCI slot; Windows® 95/98; 16MB of memory



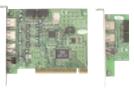
- · VIA VT83C572 chipset
- · Quad USB-A female ports
- · 1.5Mbps low speed or 12Mbps full speed transfer rate
- · Plug and play capability with external peripherals
- · Auto detects speeds and connection of device
- · Compliance w/ USB spec rev 1.0 · One-year warranty
- PCI specification V.2.1 compliant Size: 4.7"L x 3.5"W
- Weight: 0.3 lbs. · Includes user's manual

Part No. Description 172953 PCI USB card.....\$49.95 \$44.95 \$39.95

. IAMECO PCI to USB Input/Output Card

7 USB-A Female Ports

 System requirements: 486DX-66 or higher compatible (Pentium® processor recommended); one PCI slot; Windows® 95; 16MB of RAM



- VIA VT83C572 chipset
 USB spec V.1.1 compatible
- · Seven USB-A female port output connectors
- · Fully plug and play compatible
- Intel UHCI (Universal Host Controller Interface) V.1.1 register compatible • One-year warranty
- Includes user's manual and 9" extension cable
- · Size: (extension board) 1.5"L x 2.9"W
- Size: (main board) 4.8"L x 3.6"W Weight: 0.5 lbs.

Part No. Description PCI USB card...... .\$69.95 \$62.95 \$56.95 172961

AMECO ISA Dual Port Game Card

- · IBM PC/XT and higher compatibles
- · Enables two people to play a game at the same time
- Uses standard IBM type joysticks
- Two game ports
- · One-year warranty Part No. Description
- · Weight: 0.2 lbs.

25 **105515** Game card\$11.95 \$10.49 \$9.49

JAMECO Internal 4-port USB Hub

By connecting this internal card to your existing USB port on your motherboard, you can expand a single output to four outputs.

- System requirements: Windows® 95 OSR 2.0 above or Windows® 98, USB host controller on board
- One USB-B female upstream port and four USB-A female downstream port
- Real plug and play and hot-plugged devices
- · Supports self power mode
- Supports up to 127 physical devices
- Over current detection and protection per port
- · Supports 1.5Mbps low speed transfer rate and 12Mbps full speed transfer rate
- · Includes USB-A male to USB-B male cable, power cable, and manual • Size: 4.0"L x 2.6"W • Wt.: 0.5 lbs.

Part No.	Description	1	10
172751	4-port USB internal hub	.\$39.95	\$35.95

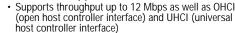
JAMECO USB 4-Port Hub

USB-A Female

Plug & Play! Daisy Chainable!







- Auto selected self powered and bus powered modes
- Over current protection and detection per port
- Hot swappable
 One year warranty

Size: 5.0"L x 2.8"W x 1.0"H · Weight: 1.5 lbs.

Part No. 10 155678 4-port USB hub......\$34.95 \$29.95

<u>||AMECO</u>° USB 3-port Hub

(with Serial / Parallel Port Converter)

- System requirements: Windows® 95 OSR 2.0 or Windows® 98 and PC with USB port
- Supports throughput up to 12Mbps
- · Connectors: USB-B female input; 3 USB-A female output; DB25 female output; DE9 male output • LED indicator for link status
- Includes user's guide, 5VDC @ 2A center negative power supply, and USB-A male to USB-B male cable Size: 5.4"L x 3.0"W x 0.9"H · Weight: 1.2 lbs.
- Description 10 Part No.

..\$89.95 \$79.95 172785 3-port USB hub.....

USB Manual Switch Box

- · 4 USB devices (printer, speakers, camera, and scanners) to 1 computer
- Input connector: (1) USB-B female
- Output connector: (4) USB-A female
- · Easy to install
- · Push button type switch

Size: 3.0"L x 2.8"Wx 1.5"H • Weight: 0.3 lbs Description

164136 4 devices to 1 computer \$19.95 \$17.95



JAMECO USB Type A Interlink Cable

Host to Host Communication

- · 6' USB-A male to
- USB-A male cable System requirements:
- 486DX-66 or higher compatible; 4-pin USB port; Windows® 95/98/NT
- Single chip (ASIC) USB host to host communication
- · High speed data transfer from 4Mbps to 8Mbps
- · Single cable solution for data communication
- Includes 3.5" USB to USB drivers Weight: 0.4 lbs. Description

164030 USB interlink.......\$49.95 \$44.95 \$39.95

IAMECO USB Cables



169359 Connect your peripherals with these USB cables.

- Color: ivory
- 169539/169367: Series A (M) to series B (M)
- 175417: Series A (M) to series B (F)
- 175433/175425/175541: Series A (M) to series A (M)

USB A to B

Part No.	Description	1	10	25
175417	USB A-B cable 3'	\$3.95	\$3.49	\$2.95
169359	USB A-B cable 6'	.4.95	4.49	3.95
169367	USB A-B cable 10'	.6.95	6.25	5.59
	USB A to	Α		
Part No.	Description	1	10	25

USB A to A				
Part No.	Description 1	10	25	
175425	USB A-A cable 3'\$3.95	\$3.49	\$2.95	
175433	USB A-A cable 6'4.95	4.49	3.95	
175441	USB A-A cable 10' 5.95	5.25	4.59	

. **JAMECO** USB-A Network Cable

17 Host to Host Connection

- · System requirements: Intel compatible 486DX4-100MHz or higher; one standard USB port: Windows® 98
- USB host to host communication
- Construct USB network up to 17 hosts with USB hub (recommend P/N 155678, left)
- Maximum data transfer rate: over 5Mbps
- Sharing resources such as printers, CD-ROMs, modems, and scanners
- Support TCP/IP, NetBEUI, IPX/SPX protocols
- Compliant with USB spec version 1.1
- Hot PNP for easy use Includes 3.5" USB device driver
- Cable length: 6' USB-A to USB-A male connectors
- · Weight: 0.4 lbs. · One-year warranty

Part No.	Description	1	10	25
172970	USB network cable	\$49.95	\$44.95	\$39.95

USB-A to PS/2 Mini DIN 6 Adapter

- System requirements: IBM PC/AT compatible system, Windows 95/98/NT, and USB-A
- Input connector: 4-pin USB-A male connector
- Output connectors: (2) 6-pin mini DIN connectors
- Complies to USB specification 1.1
- Power consumption: 500mA CE approved
- Supports energy saving suspend and remote resume operations Plug and play compatible
- · Cable length: 30" Includes user's guide Size: (unit) 2.3"W x 2.7"D x 1.1"H • Weight: 0.3 lbs. Part No. Description 10
- 168751 USB-A to PS/2 \$39.95 \$35.95 \$31.95



USB-A to Ethernet (RJ-45) Adapter

- System requirements: PC or notebook with USB support and Windows® 95/98
- Input connector: 4-pin USB-A female connector
- · Output connector: RJ-45 connector (8P8C)
- · Complies with IEEE-802.3 10-baseT and Version 1.0 and 1.1 USB standards · Color: blue
- · No I/O address or IRQ conflict hassles
- · Supports PnP and hot swapping · CE approved
- Bus powered design, no external power source required • Includes 3.5" software and 3' USB-A male to USB-B male cable
- Size: (unit) 1.5"W x 2.2"D x 1.4"H Weight: 0.4 lbs. Part No. Description 10 USB-A to ethernet .. \$59.95 \$53.95 \$47.95

IAMECO USB Gender Adapters

USB-A to USB-B

169383: Series A male to series B female



to series B male · Color: ivory

Part No.	Description	1	10	25
169383	1.3"L x 0.4"W\$	6.95	\$6.35	\$5.59
169375	1.7"L x 0.6"W	6.95	6.35	5.59

169375

JAMECO USB to Parallel **Printer Adapter**

(USB-A Male - DB25 Female)

- System requirements: Intel 486DX2-66 or higher compatible; ständard USB 4-pin port; Windows® 98/2000/NT5.0
- USB specification Rev 1.1 compliant
- Single chip (ASIC) USB to parallel host to host communication
- USB full speed (12MBps data throughput) communication and bus powered
- · Includes 3.5" drivers, 5'6" USB-A to USB-B male cable, and user's manual
- · IEEE 1284 (bi-directional parallel interface) compliant
- · USB printer class specification 1.0 compliant • Size: 2.7"L x 2.4"W x 1.0"T • Weight: 0.5 lbs.

Part No. Description 173008 USB to Parallel Adapter \$39.95 \$35.95 \$31.95

JAMECO USB to RS232 Serial Converter

USB-B Connector

- · Minimum system requirements: IBM compatible PC with Pentium® processor and USB connectivity, Windows® 98/ OSR 2.1 & 16MB of RAM
- Non-power consumption
- · Real Plug and Play and Hot-Plugged device
- · 1 upstream port with USB-B female connector
- 1 downstream port with DB25 female connector
- Complies with USB specification Rev. 1.0
- · Supports full and low speed devices
- · Automatic USB protocol handling
- · Includes 6' USB-A male to USB-B female cable and 3.5" driver diskette
- Size: 3.0"L x 2.2"W x 0.8"H Weight: 0.6 lbs.

164048 USB-B to serial converter ... \$49.95 \$44.95

JAMECO 4 Conductor USB Cable

- 150 volts
- Temperature rating: 80°C
- Red and black wire: 24 AWG stranded (7/32)



Green and white wire: 28AWG stranded (7/36) · UL/CSA approved

* Prepackaged: please order in increments of 25', 100' or 1000' Part No. Description 100 ft. 1000 ft. 25 ft. USB cable\$7.00 \$21.00 \$165.00

JAMECO USB-A Female Cable

- · Supports data transfer rates of 12Mbps
- · Allows connection of up to 127 peripheral devices
- Dual USB-A Female connectors Weight: 0.1 lbs.
- · Both isochronous and asynchronous data transfers
- · Plug & play installation and hot plugging
- Built-in power distribution for low power devices Part No. Description 144813 USB-A panel mount \$6.95 \$6.25 \$5.59

ATEN Male USB Printer Cable

USB-A Connector

- · Full compliance with the USB spec V.1.0
- · 4-pin USB-A male to 36-pin male centronics connector
- Supports true bi-directional communication
- · Applicable to standard and bi-directional printers
- · Weight: 0.4 lbs

	Description	1	10	25
155352	6' USB cable	\$29.95	\$26.95	\$23.95

USB 3-Button Trackball

- · 4-pin male USB-A male connector
- · Ergonomic design with detachable wrist rest
- Removable retaining ring for easy ball removal and cleaning
- Large button design
- · Tactile micro-switches for reliable sound and feel
- · Opto-mechanical technology for accurate pointing
- 20-6400 dpi variable resolution
- · Attached scroll-in mouse program for scrolling, zooming and other functions under Windows® environment • Includes software drivers
- · System requirements: computer system with USB female port and Windows® 95/98
- Size: 5.5"L x 4.7"W x 2.0"H Weight: 1.0 lb.
- · One-year warranty

Part No. Description 159100 USB trackball.....\$34.95

(JAMECO USB 3-Button Mouse

USB-A Connector

- · For systems with USB ports · 4-pin USB-A
- male connector
- · Ergonomic design for comfortable feel
- Color: gray · One year warranty
- Size: 4.4"L x 2.4"W x 1.0"H Weight: 0.3 lbs.

Description 155686 USB-A ergonomic mouse\$9.95

JAMECO USB PenCam Digital Camera New

- · USB Interface
- Compatible with Windows® 98/ 2000 & ME
- High resolution 352 x 288 (20 still shots)
- Low resolution 176 x 144 (80 still shots)
- · Up to 12 seconds of AVI streaming video
- Up to 2 hour battery life (full time usage)
- · 10 second self timer
- · Requires (2) AAA batteries (not included)
- · Includes CD-ROM software bundle, 5' USB cable, camera stand, and camera clip
- CD-ROM software bundle includes Pocket Cam Manager, Photo Express 3.0, Photo Explorer 3.0, COOL 360 1.0, Video Live Mail Plus 3.11b, and
- Microsoft Net Meeting 5.0 One-year warranty Size: 4.8"L x 1.3"W x 0.8"D • Weight: 0.4 lbs.
- Part No. Description 177199 Digital PenCam\$89.95 \$79.95

USB-A & B Connectors and Pin



174060 USB-B

159724

174051 USB-B

161023 USB-A

Price

159716 USB-A

- · Voltage current rating: 1A @ 30VAC
- Insulation resistance: $1000M\Omega$ (min)
- · Dielectric with standing voltage: 750VAC

159716/174060: USB Male Connectors

- · 3 part housing: tin plate over brass and glass fiber
- 4-pins (P/N 159724) required per USB connector
- · Housing is easily snapped together 161023/174051:

USB Female Connectors

· PC mount right angle with board locks

159724: Male Crimp Pin

- · Contact brass
- Pin for P/N 159716 and 174060 (4 required)
- Use P/N 159265 for crimping tool (pg 130)
- * Prepackaged: please order in increments of 10, 100 or 1000 Part No. Description 100 **159716** USB-A connector (M)..**\$.55 \$.45** \$.29 \$.25

161023 USB-A connector (F) .. .59 .49 .39 29 174060 USB-B connector (M)69 .49 .35 **174051** USB-B connector (F)55 .32 159724 Crimp pin....*

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152 Mice, Keyboards, Keypads and Accessories

Microsoft® 2-Button Mouse

- · Serial mouse
- · IBM PC/XT and higher compatibles
- Includes Microsoft® setup diskette, DE9 connector and manual
- Size:4.5"L x 2.5"W x 1.4"H
- · Weight: 0.6 lbs.

Part No.	Description	Price
111860	2-button serial mouse	\$9.95

Microsoft® Intellimouse

Microsoft® Office 97 Compatible

Combines the traditional left and right mouse button with a scroll button that makes it easier to zoom and scroll right at your fingertips.



· Weight: 0.4 lbs. · One-year warranty

Part No. Description 10 **145488** 2-button serial with scroll...\$**29.95** \$26.95

, **JAMECO**° 3-Button Mouse

- · Serial mouse
- · IBM PC/XT and higher compatibles
- · Microsoft® mouse compatible
- Size: 4.3"L x 2.3"W x 1.2"H
- · Weight: 0.5 lbs.
- · One-year warranty

Part No. Description .\$4.95 \$4.49 \$3.95 **104441** Serial mouse.....

. IAMECO PS/2 Serial

Two Button Mouse

- PS/2 connector (6-pin mini DIN)
- IBM PC/XT/AT/PS/2 and compatibles
- Compatible with
- all major application software Cable length: 4'3"
 Includes 3.5" drivers
- Size: 4.4"L x 2.5"W x 1.4"H · Weight: 0.3lbs.

Part No. Description 10 100

PS/2 mouse\$4.95 \$4.49 \$3.95 \$3.25 174326

JAMECO PS/2 Serial Two Button Mouse

No Adapter Required

- · PS/2 connector (6-pin mini DIN)
- · Compatible w/ IBM PC/XT/AT 386/486
- · Opto-mechanical encoder
- · Compatible with all major application software
- Dynamic resolution and fast tracking speed
- · Cable length: 4' 9" · Includes set up diskette
- Size: 4.2"L x 2.3"W x 1.2"H Weight: 0.4 lbs.

Part No. Description 159513 PS/2 mouse\$9.95 \$8.95 \$7.95

JAMECO Mini Mouse Pad

Perfect cramped workspace solution!

- · Tough non-skid
- neoprene backing Smooth-gliding cloth surface on top
- Size: 7.0"L x 5.5"W
- · Weight: 0.1 lbs.



DigiSys PS/2 Serial 3-Button Mouse

- Male PS/2 connector (6-pin mini DIN)
- Compatible with IBM PC/XT/AT systems
- Compatible with major applications
- Includes 3.5" driver and utilities diskette
- Size: 4.2"L x 1.2"H x 2.5"W · Weight: 0.4 lbs.

Part No. Description 10 166748 PS/2 3-button mouse\$9.95 \$8.95 \$7.95

QTRONIX. 2-Button Mouse

- · Male PS/2 connector (6-pin mini DIN)
- Compatible with IBM, PS/2 and Pentium® compatibles
- Compatible with Windows® 95/98
- Wheel for scrolling · Eraonomic design
- · High performance application bundled & easy to setup
- Versatile control panel for productivity
- · Includes installation sheet and 3.5" disk drivers

Size: 4.5"L x 2.5"W x 1.5"H · Weight: 0.5 lbs. Part No. Description 10 170317 Lynx 3D Net......\$11.95 \$10.95 \$9.95

QTRONIX. Trackball with Menu Software

- IBM PC/XT and higher compatibles
- Over 24 software menus to ease use of Lotus, dBase, WordPerfect and more
- Variable resolution (20-6400 dpi)
- Convenient button lock feature for holding while dragging and drawing
- Ergonomic design for comfortable feel
- 3.5" disk One-year warranty
- Size: 5.5"L x 4.6"W x 2.0"H
 Weight: 1.2 lbs.

Part No. Description 128995 LIBRA 90 MP PRO \$29.95 \$26.95 \$23.95

QTRONIX. 17-Key Keypad (PS/2)

A compact keypad designed for use with IBM compatible laptops and desktop PC

- For IBM PS/2 and compatibles
- Installs into 6-pin DIN keyboard connector (no software required)
- Auto-repeat function
- Tactile click sound and touch
- Switch life of 20 million cycles
- Two key roll over Size: 5.6"L x 3.4"W x 0.9"D · Weight: 0.5 lbs. · One-year warranty

Part No. Description Scorpius 20PB\$34.95 \$31.49 \$27.95

QTRONIX. 17-Key USB Keypad

- System requirements: IBM compatible PC, Windows® 98/2000, USB-A port
- Reliable rubber mechanical switches
- **USB-A** connector
- 17 overall keys with full numeric functions
- Adjustable tile mechanism
- Auto repeat function
- No external power supply needed Tactile keystroke
- 20,000,000 life cycles per switch

Size: 3.5"W x 0.9"D x 5.5"H • Weight: 0.5 lbs. Description 171141 USB keypad\$39.95 \$35.95 \$32.49

Order On-Line www.jameco.com

QTRONIX_∞ 22-Key RS232 Keypad

- IBM PC/XT and higher compatibles
- · Tactile click-sound and touch
- · Auto repeat function
- · RS232 DE9 connector
- · Includes 3.5" driver
- diskette and manual · 9600 bps, data bits: 8, stop bits:
- 1, start bit: none, no parity
- 2-key rollover · Color: beige
- · Weight: 0.8 lbs. · One-year warranty
- Size: 6.2"L x 4.2"W x 1.3"H

Part No. Description 129357 Scorpius 22RW......\$39.95 \$35.95 \$32.49

QTRONIX_® 22-Key Keypad (PS/2)

For Notebooks

- · System requirements: IBM PC or notebook and compatibles, Windows operating system, PS/2 port
- · 22-keys with full numeric functions
- Auto repeat function
- · Adjustable tilt mechanism
- · Tactile keystroke
- · 20 million life cycles per switch
- · No external power supply needed
- · Includes manual and PS/2 to 5-pin din (AT) adapter
- · Weight: 0.8 lbs. Size: 6.2"L x 4.2"W x 1.3"H

Description Scorpius 22APW ...\$34.95 \$29.95 \$25.95 176831

JAMECO 18-Key Keypad with Magstripe Card Reader

- · IBM PC/AT compatible, AT keyboard interface
- · Mechanical key switch
- · Bi-directional reading card through reader slot
- Power supplied by computer keyboard port
- Carriage return for card reader is selectable
- Switch selectable for start sentinel (SS) or end sentinel (ES)
- · Use Com software to read data
- · Magstripe card reader requires separate POS software for direct application use
- Size: 7.1"L x 4.4"W x 1.5"H · Weight: 1.1 lbs.

Part No. Description 176276 Keypad w/ card reader \$159.95 \$144.95

J<u>AMECO</u>® 84-Key AT Keyboard



- AT/386/486 and compatibles
 84-key layout
- Tactile feed back • Size: 12.8"L x 6.6"W x 1.0"H
- · Weight: 2.4 lbs. One-year warranty

Part No. Description 114868 84-key AT keyboard..\$51.95 \$45.95 \$39.95





SEGA Win 95 104-Key Keyboard



- IBM AT / PS/2 and higher compatible
- · LED indicator for Num, Caps and Scroll Locks
- Use P/N 85500 for AT systems Ergonomic style
- · Tilt mechanism
- Tactile key
- · 12 function keys
- · Color: black
- Size: 18.5"L x 7.0"W x 1.0"H Weight: 2.7 lbs.

Part No. Description

10

135482 104-key keyboard \$14.95 \$13.49 \$11.95

QTRONIX. Win 95 104-Key Keyboard with Jumbo Trackball



- PC/AT/PS/2 compatible w/ DOS 3.0 or higher
- · "N-Key" roll-over for quick typists
- · Tactile click sound and feel . One-year warranty
- · Includes software and AT adapters

• Size: 19.0"L x 6.8"W x 1.4"H • Weight: 3.7 lbs.

1 10

Part No. Description

128717 Scorpius 35MP......\$99.95 \$89.95 \$80.95

QTRONIX. Win 95 107-Key Keyboard



- IBM AT or PS/2 and higher compatible
- Tactile key stroke high quality rubber mechanical switches
 Windows® 95 and 98 compatible
- ACPI 3 keys (wakeup, sleep & power) for Win® 98
 Adjustable tilt mechanism
 Detachable wrist pad
- · Recommend P/N 85500 (pg 181) for AT type
- keyboard connectors Permanently attached 6' cord
- 20,000,000 life cycle per switch One-year warranty Weight: 2.8 lbs.

• Size: 18.5"L x 7.6"W x 1.5"H

Part No. Description

168381 Scorpius 98 plus series\$14.95 \$13.49

QTRONIXWin 95/98 107-Key PS/2 Keyboard



- · IBM PS/2 and higher compatibles
- · Designed for Windows® 98 with ACPI keys (wake, sleep and power) • Windows® 95 compatible
- · Adjustable tilt mechanism
- · Tactile keystroke with high quality rubber mechanical switches Color: black
- · 20,000,000 life cycles per switch
- Size: 18.1"L x 6.3"W x 1.0"H
 Weight: 2.2 lbs. 1

Part No. Description **169535** Scorpius 98A......**\$16.95 \$14.95** Monorail Win 95 104-Key Keyboard



- · For PS/2 systems
- · LED indicators for Num, Caps and Scroll Locks
- · 12 function keys with separate cursor and numeric keys · Color: black
- · Membrane contact technology
- Size: 18.3"L x 6.5"W x 1.5"H
 Weight: 1.5 lbs. Part No. Description

154721 Windows® 95 104-keyboard ...\$7.95

JAMECO 107-Key Ergonomic **Keyboard for Windows® 95**



- · IBM PC/ AT/ PS/2 and higher compatibles
- For PS/2 requires adapter P/N 159097 (pg 183)
- · Built-in wrist rest
- · Membrane switch with tactile feedback
- · 10 million life cycles per switch
- Size: 19.0"L x 9.5"W x 1.4"H Weight: 2.9 lbs. Part No. Description

163774 Win 95 ergonomic keyboard \$29.95 \$26.95

Lite-on 89-Key Infrared Wireless Keyboard



- · Wireless device integrated text, pointing, and multimedia functions
- 14 extra programmable function, one DRAG key
- · Full range mouse control keys
- · Infrared transmitting technology (up to 23')
- Includes keyboard, receiver unit, airboard manager software diskettes, users manual, Y cable with two connectors (6-pin keyboard and 9-pin RS232)
- Size: 15.3"L x 7.5"W x 1.5"H
- Weight: 2.9 lbs. One-year warranty System requirements: IBM PC or compatible system, Windows® 95 (for Airboard Manager Software), available 9-pin RS232 serial port Description

89-key wireless keyboard \$69.95 \$59.95 145605

EXIOM. Water Resistant 101-Key Keyboard



- IBM AT, PS/2 compatibles
- · Membrane contact technology
- 5VDC @ 250mA

10

- · Operating humidity: 10% to 95%rh
- Operating temp.: 0 to 55°C
- Color: gray One-year warranty

Size: 15.5 L x 7.3 W x 1.8 H
 Weight: 3.2 lbs.

Part No. Description Price 141866 Water resistant keyboard\$49.95

QTRONIX. 108-Key **Compact Keyboard**



- · IBM PC PS/2 or higher compatible
- 12 function keys
- · LED indicator for Num, Caps, and Scroll Lock
- Supports three Windows® 98 ACPI keys
- · High quality rubber mechanical key switches
- Size: 15.5"L x 6.5"W x 1.1"H
- · Weight: 1.9 lbs

Part No. Description 180347 Scorpius 2KP......\$39.95 \$35.95 \$32.49

SUN Win 95 104-Key Keyboard



- · For PS/2 systems
- · LED indicators for Num, Caps and Scroll Locks
- 12 Function keys with separate arrow and numeric keys
- Tactile feedback · Tilt mechanism
- · Unmarked window keys
- Size: 18.2"L x 7.0"W x 1.5"H Weight: 2.7lbs.

Part No. Description **173649** Windows® 95 104 keyboard .. **\$8.95** \$7.95

NMB 101-Key Keyboard **Tactile Touch**



- · For PS/2 systems
- · LED indicators for Num, Caps and Scroll Locks
- Use P/N 159089 or 85500 (pg 181 for AT systems)
- 12 function keys with separate cursor and numeric keys
- Size: 18.0"L x 6.5"W x 1.5"H
 Weight: 3.2 lbs.

Part No. Description 166836 101-key keyboard....\$14.95 \$13.49 \$11.95

HEWLETT® 117-Key Multimedia Keyboard for Windows®



- · LED indicators for Num, Caps and Scroll Locks
- · For PS/2 systems
- · Mail key button, HP top tools button, internet button, menu button, lock button, HP customer information button, mute and volume buttons, and 4 shortcut buttons
- 12 function keys w/separate cursor and numeric keys
- · Headset and microphone ports
- Adjustable tilt mechanism Includes 3.5" drivers
- Size: 18.9"L x 7.0"W x 1.6"H Weight: 4.3 lbs.

Part No. Description 1 176874 Keyboard......\$29.95 \$26.95 \$23.95



154 Keyboards, Scanners, Printers and Accessories

JAMECO 117-Key Multimedia **Keyboard For Windows**



- · For PS/2 systems
- · LED indicators for Num, Caps, and Scroll locks
- ± volume buttons, mute button, forward / reverse/play/stop button for multimedia, WWW button, MS DOS button, My Doc button, Menu/? button, screen saver button, close button
- 12 function keys w/ separate cursor and numeric keys
- Includes 3.5" drivers and keyboard labels for buttons
- Size: 18.5"L x 7.0"W x 1.8"H
 Weight: 3.6 lbs.

Part No. Description 174334 Multimedia keyboard .. \$14.95 \$13.49 \$11.95

QTRONIX. 86 Key Wireless **Keyboard Infrared Technology**



- · Plug and play
- · Wireless device integrated text, pointing, and multimedia functions
- · 20 hot keys to quickly access internet browser and multimedia performance
- · 10 programmable hot keys which can be redefined by user's command
- Compatible with IBM PC which supports PS/2
- · Infrared transmitting technology (transmission distance up to 23')
- · DIP switch setting for 16 different channels
- · Includes keyboard with mini trackball, receiver unit with 6-pin mini DIN (PS/2) male connectors for keyboard and trackball, CD-ROM drivers
- Size: 14.1"L x 6.3"W x 1.3"H Weight: 2.1 lbs.

Part No.	Description 1	10
176786	86-key wireless keyboard\$49.95	\$44.95

JAMECO Keyboard Drawers

Elevates CPU and CRT 4.0 to alleviate neck tension.

· External size: 22.0"L x 15.5"W x 4.0"H

· Weight: 8.5 lbs.

72881:

Slides underneath desktop for storage.

• External size: 21.5"L x 12.5"W x 1.5"H

· Includes convenient tray for storing pens and other office supplies · Weight: 4.0 lbs.

Part No.	Description	1	10	25
20239	Desktop mounting\$27.9	95	\$24.95	\$22.49
72881	Mounts under desk16.9	95	14.95	13.95

72881

HEWLETT® Scan Jet 6200C

· Factory refurbished · Minimum system requirements: PC with Pentium (586 or better), 2X CD-ROM, Windows®95 or better operating system; 16MB of RAM; 40MB hard disk

space, VGA monitor, and USB port Scanner type: Flatbed, one pass color and monochrome

 Input modes: front panel scan button, or from software via TWAIN

Resolution: 1200dpi hardware sampling

Bit depth: 36-bit color

Scan speeds: 3, 4, 5, or 6 ms/line (depending on image type and resolution)

Scaling: unlimited • Multiple file formats

Maximum paper size: 8.5" x 11"

Interface: USB (SCSI capable but requires cable and controller card)

Size: 19.6"D x 12.3"W x 4.7"H • Weight: 12.8 lbs.

Part No. Product No.

184794 Scan Jet 6200C..... .\$169.95 \$152.95

J<u>AMECO</u>® Steel Computer Stand

With Casters

- · Easy to assemble
- Save valuable work space
- Adjustable range: 4.5" to 7.5"
- Supports IBM PC XT/AT system units
- 3mm steel material
- · Weight: 7.5 lbs.

Part No. Description Computer stand ... \$14.95 \$13.49 \$11.95

JAMECO° 12" Monitor Stand

- · For 12" monitors
- Anti-skid feet
- 360° swivel 25° tilt
- Color: beige
- Base size: 11"W x 10"D

· Weight: 2.6 lbs. Part No. Description

180321 12" monitor stand.....\$9.95 \$8.95 **JAMECO**° 14" Monitor Stand

- · For 14" monitors
- 360° swivel
- 12.5° tilt
- · Color: beige
- Base size: 14"W x 12"D
- · Weight: 4.0 lbs.

Part No. 14" monitor stand ..\$14.95 \$13.49 \$11.95



- · Assembly required
- Wall mount screws not included
- Color: black
- One-year warranty
- Requires unit base be mounted securely to wall stud

181817: • Supports up to 66 lbs. **133840:** • Supports up to 60 lbs.

Part No. Description 10 12"-18" TV wall mount......\$32.95 181817 14"-18" TV wall mount......29.95 133840 20"-29" TV wall mount.......59.95

· Weight: 9.0 lbs. · Weight: 9.5 lbs.

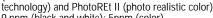
156988: • Supports up to 165 lbs. • Weight: 26 lbs.

26.95

PACKARD Office Jet Pro 1170CSE **Printer, Scanner and Copier**

- Factory refurbished
- Includes manual, software, and IEEE -1284 cable

600 x 600 dpi (black and white) with HP Ret (resolution enhanced



• 9 ppm (black and white); 5ppm (color)

- Letter and legal size, A4, executive, index cards media sizes
- Plain paper, premium inkjet, photo paper, glossy paper, transparencies media type

Scanner

- Flat bed type OCR software Twain compliant
- Resolution up to 1200 dpi enhanced (300 dpi optical)
- 30-bit for color and 8-bit for gray scale

- Copier 600 x 600 dpi for black and white
- 600 x 600 dpi with PhotoREt II color
- Up to 9 copies/min. (B&W); up to 3 copies/min. for color
- Up to 50 pages of multiple copies
- 25 to 400% with auto settings for full page enlargements

Part No.	Product No.	Price
183097	HP1170SE	\$349.95

HEWLETT® Series 370 **Printer, Scanner and Copier**

- · Factory refurbished
- Includes manual and software
- Uses HP51629A (black) and HP51649A (color) printer cartridges - nót included (see below)

- 600 x 300 dpi (black and white)
- Letter, legal, A4, executive size media
- Plain paper, inkjet paper, transparencies, envelope media type • 3 ppm (pages per minute)
- Scanner • OCR software • 300dpi resolution
- Copier
- 300 dpi resolution, 8-bit grayscale 50 seconds per page
 Up to 99 copies
- Reduction of up to 70% of its original size

Part No.	Description 1	10
181948	HP Series 370\$149.95	\$134.95
Part No.	Description	Price
182967	HP51629A black cartridge	\$35.95
182975	HP51649A color cartridge	36.95

PACKARD Scan Jet 5100C (Color)

- Factory refurbished
- System requirements: 486 or better; Windows® 95; 16MB of RAM or more; VGA monitor (256 colors) or



- 600dpi hardware super sampling; 1200 dpi enhanced
- 36-bit color image processor
- 6ms/line normal exposure rates; 2ms/line fast exposure rate One pass color flat bed scanner
- 12% to 400% scaling at 300 dpi resolution HP intelligent scanning technology: dual image scanning, automatic page decomposition, automatic raster to vector version for black and
- white line art images Maximum document size: 8.5" x 11.7"
- · Includes manual and software
- Size: 19.1"L x 12.0"W x 4.9"H Weight: 12.5 lbs.

Part No. Description 181956 ScanJet 5100C\$129.95 \$116.95

JAMECO ISA 16-Bit **Super VGA Card**

512KB on Board

- · IBM AT and higher compatibles
- Output HD DA15 (analog)
- 1024 x 768 resolution in
- non-interlaced and interlaced modes
- · Includes manual and software
- Supports 16 colors requires 1MB video RAM
- · Includes 512KB video RAM, expandable to 1MB by adding one P/N 128688 chips (pg 17)
- Supports VESA standard graphics and text modes
- Emulates VGA, EGA, CGA, MDA and Hercules modes
- · Weight: 0.5 lbs. · One-year warranty

Part No.	Description	1	10	25
104660	VGA card	\$59.95	\$53.95	\$47.95

Jameco° PCI 24-Bit SVGA **Graphics Card**

4MB on Board

- Drivers support Windows[®] 3.x/95/98/NT4.0
- SIS 6326 AGP chipset
- 24-bit color @ 800 x 600 resolution
- · Refresh rate: 60/75Hz
- · Best support for DVD and MPEG-II playback
- HD DB15 female connector
- · Includes users manual and CD-ROM
- Size: 5.3"L x 3.5"W Weight: 0.4 lbs.

Part No.	Description	10
167476	PCI accelerator card\$39.95	\$35.95

JAMECO VESA 24-Bit **Graphics Accelerator Card**

1MB on Board

Increases the speed of graphics and windowing programs by up to



- 15 times that of standard VGA.
- · Intel® 486 and higher compatibles
- Provides 24-bit true color at 640 x 480 pixels, 16M colors
- · On board memory: 1MB. Expandable to 2MB using 256K x 16 DRAM P/N 128688 (pg 17)
- Non-interlaced/interlaced modes supported
- · Connector: HD DA15 female
- Weight: 0.7 lbs.
 One-year warranty

Part No.	Description	1	10
137285	Graphics accelerator	\$49.95	\$44.95

JAMECO® AGP Graphics Card

8MB memory on board

System requirements: Pentium® or higher compatible, 8MB of memory, VGA monitor, AGP slot; CD-ROM drive, Windows® 95/98/2000



- · NVDIA RIVA TNT2 series 32-bit graphics engine
- High-performance 128-bit 2D/GŬI/DirectDraw · HDDB15-pin female connector
- Texture blend supports multi-texturing, bump mapping, texture modulation, light maps, reflection maps, detail textures
- · Per pixel perspective correct texture mapping
- · Multiple video windows with hardware color space conversion and filtering
- Video acceleration for DirectShow, MPEG-1, MPEG-2, and indio • Includes manual and CD-ROM drivers
- Size: 5.3"L x 2.3"W Weight: 0.4 lbs.

Part No.	Description 1	10
177560	AGP graphics card\$59.95	\$53.95

JAMECO PCI 64-Bit 3D Graphics Card

Works with all SVGA Cards

12MB on Board

System requirements: 60MHz Pentium®; CD-ROM drive: 16MB memory; DOS version 6.2 or higher; Windows® 95/98/NT3.51/NT4.0



- · One-year warranty
- Includes both triangle and texture rendering engines
- · HDDA15 male and female connectors
- · Includes users manual, installation guide and drivers on CD-ROM and cable adapter
- Size: 8.0"L x 4.0"W · Weight: 1.6 lbs.

Part No.	Description	Price
160961	12MB EDO RAM on board	\$69.95

. IAMECO 5" Color Monitor

NTSC Video with Audio

This color monitor has both video and audio hook-ups. It can be mounted on a wall or placed on a desktop. Screen can be tilted for better viewing. Speakers on base unit for audio.

- 5" viewable screen
- · Requires 12VDC regulated power supply (P/N 162996 - pg 90)
- RCA jacks for audio/video
- For camera recommend P/N 169404 (pg 157)
- Size: (unit) 7.5"L x 6.3"W x 2.5"H Weight: 1.6 lbs.

Part No. Description 169412 5" color monitor......\$299.95 \$269.95

JAMECO 10" Black and White **Security Monitor with Audio**

EIA Format

- Input voltage: 120VAC @ 60Hz (2-prong 5' cable)
- 9" viewable screen
- · Resolution: 700 line resolution
- · LED indicator for power
- · Push down front panel for vertical hold and size, brightness, volume, and contrast adjustments, power on/off switch
- Horizontal frequency, focus, and sub-brightness adjustment, impedance input switch, (1) BNC female & (1) RCA jack for audio/video input/output at rear panel • Includes instruction manual
- Size: 9.4"W x 9.5"D x 8.9"H Weight: 14.3 lbs.

Description 10" black & white monitor \$109.95 \$99.95

. JAMECO 6" Black/White Monitor

EIA Format

- · 6" 2-channel flat screen monochrome monitor
- · Vertical hold, brightness and contrast adjustment knobs at rear of monitor
- · Includes 20M audio/video cable, manual & 15V @ 1A center positive pwr. supply
- Weight: 5.3 lbs. • Size: 6.7"W x 7.2"D x 5.2"H Part No. Description Wt.(lbs) 1 169615 6" monitor 5.3.....\$79.95 \$71.95

EIA Cameras available on page 156.

J**ameco**° 14" SVGA Color Monitor

- · Refurbished (mfg. may vary)
- · IBM PC/XT or
- higher compatible 0.28mm dot pitch
- 14" diagonal view
- HDDB15 male connector
- Power, contrast, brightness, horizontal and vertical

position, recall and trapezoid knob adjustments

- Resolution: 1280 x 1024 @ 60Hz
- Input voltage: 100-240VAC @ 50/60Hz
- · Includes power cable, tilt and swivel base
- Size: 14.2"W x 14.6"D x 13.5"H Weight: 25 lbs.

Part No. Description 14" SVGA color monitor......\$89.95 \$80.95 174537

. J<u>ameco</u>° 15"/17" Svga Color Monitors

- · Refurbished (mfg. may vary)
- IBM PC/XT or
- higher compatibles
- 0.28mm dot pitch · Resolution:
- 1280 x 1024 @ 60Hz
- Digital panel control Input voltage: 100-240VAC
- 50/60Hz (auto switching)
- Power, contrast, brightness, horizontal and vertical size position, recall and trapezoid front control
- HDDB 15-pin female connector UL/CSA/TUV approved
- Includes power cable and tilt and swivel base 153306: • 13.5" diagonal view
- Size: 14.5"W x 16.0"D x 14.6"H Weight: 45 lbs.
- 181905: 15.5" diagonal view
- Size: 16.5"W x 17.0"D x 14.5"H
 Weight: 47 lbs. Part No. Description

153306 15" SVGA color monitor \$119.95 \$107.95 181905 17" SVGA color monitor 169.95 149.95

JAMECO 4" Color Monitor (LCD)

NTSC Format

- · High resolution and low power consumption
- TFT active matrix
- Input voltage: 12VDC @
- 500mA center positive Power consumption: <800mA
- Video input: composite video signal video signal IV p-p; 75Ω • Wider view angle Backlight: cold cathode filament tube
- Resolution: 234 x 383 dpi; RGB delta configuration • Includes manual
- 2" long stripped and tinned wires for power and video connection • Wt: 1.1 lbs.
- Size: 4.7"L x 3.4"W x 1.5"H (unit) 4.0"L x 3.3"W x 0.7"H (display)

Part No. Description 154747 4" LCD color monitor \$299.95 \$269.95

JAMECO 4" LCD Color Monitor

NTSC Format

- High resolution, low power consumption
- TFT color LCD
- Backlight: cold cathode flourescent lamp • Power source: 12VDC @ 400mA
- · Resolution 383 x 234 dpi • 5" long lead wire w/ 4 position molex type power connector • Tint color and brightness adjustable
- . Size: 4.1"L x 3.3"W x 0.7"H (display)
- Size: 4.7"L x 3.3"W x 1.3"H (unit) Weight: 0.7 lbs. Part No. Description





□ 3

□ 4

156 Monitor Testers, Video Cameras and Accessories

JAMECO Black and White CCD Camera with 6" Monitor

Monitor: EIA Format

- · 6" 2-channel flat screen monochrome monitor
- · Vertical hold, brightness and contrast adjustment knobs at rear of monitor



- · Includes 20M audio/video cable, manual & 15V @ 1A center positive pwr. supply
- Size: 6.7"W x 7.2"D x 5.2"H

Camera: EIA Format

- 512(H) x 492(V)
- 1/3" CCD image sensor • 380 TV line resolution
- · 6 IR LED light for view in the dark application
- · 15.734kHz horizontal synch. frequency
- 2:1 interlace scanning system S/N ratio: 48dB
- 1/100,000 second electronic shutter
- 3.6mm lens with F2.0 Includes camera bracket
- Audio output: 2Vp-p, 50Ω maximum
 0 lux at 2M
- · BNC connector for video and RCA connector for audio
- Power supply: 12-15V @ 130mA FOV: 92
- Wt.(lbs) Part No. Description

170616 Camera w/ monitor 7.7....\$159.95 \$143.95 **169615** 6" monitor only 5.3.....**79.95 71.95**

GME Computer Monitor Tester

Portable tester helps you troubleshoot, test, and align computer monitors quickly!

- · Test MDA, CGA, EGA, VGA and Super VGA resolution monitors
- · Checks color bars, color raster (white, red, green, blue), dots, crosshatch and windows
- · Both digital/TTL 9-D and analog 15-HD
- · Power with either a 9V battery or an external AC adapter (P/N 100845 - pg 89) • One-year warranty
- Size: 5.6"L x 3.7"W x 1.8"H · Weight: 0.6 lbs. Part No. Description
 - Computer monitor tester \$139.95 \$125.95

GME Computer Monitor and NTSC Tester (Mac, PC and TV)

- · Tests VGA, Super VGA, Mac monitors and TVs
- · Connectors: HD15, DA15

137761

- · Checks full field color bars, color raster, dots (static and dynamic convergence), cross-hatch and windows (power supply regulation, checks for a clear distinction between white and black portions)
- · Two video connectors for TV, composite and S-video
- · Power with either a 9V battery (not included) or an external DC adapter • Size: 5.5"L x 3.0"W x 1.4"H
- · Weight: 0.7 lbs. One-year warranty

Description Part No.

149729 Computer monitor tester \$199.95 \$179.95

IAMECO Power Base

5 Switched AC Power Outlets

- · Maximum spike current: 4,500 amps, 90 joules
- Size: 13.7"L x 12.8"W x 1.5"H
- Weight: 7.0 lbs

20159	Power base	\$14.95	\$13.49	\$11.95	
Part No.	Description	1	10	50	
vveigni	. 7.0 105.				

JAMECO B&W CCD Camera Board

FIA Format

- 1/3" CCD image sensor
- 510(H) x 492(V)
- · Horizontal resolution: >350 lines
- Scanning system: 2:1 interlace
- Sensitivity: 0.7 lux/F2.0
- S/N ration: 46dB
- Video output: 1Vp-p, composite video 75Ω
- · Power supply: 12VDC
- Power consumption: 110mA FOV: 92°
- Electronic shutter: 1/125,000 sec. (linear)
- Size: 1.3"L x 1.3"W x 1.2"H Weight: 0.1 lbs.

Description Part No. Camera board\$49.95 \$44.95 171029

SONY Black & White **Camera Boards**

Sony Chipset

- · Lens: 3.6mm
- · Signal to noise ratio: >48dB
- · Requires 12V power source (not included)
- 7" (P/N 150949)/ 6" (P/N 150931) wires with 4-pin Molex type keyed connector to board and stripped and tinned on one end



One-year warranty

150949: • EIA system 510(H) x 492(V)

- 1/3" Sony CCD image sensor 400TV line resolution
- Auto shutter speed: 1/60 1/100,00
 FOV: 92°
- Size: 1.7"L x 1.7"W x 1.1"H • 0.1 lux/F2.0 150931: • EIA system 537(H) x 505(V)
- · Composite output with 420 line resolution
- Shutter speed: 1/60 1/1000 FOV: 92.6%
- Video output: 1.0Vpp composite video/ 75Ω
- Size: 1 3"L x 1 3"W x 1 0"H

312C. 1.3 L X 1.3 W	X 1.0 11			
Part No. Description	Wt. (lbs.)	1	10	25
150949 Board w/ aud	io 0.08 \$89	.95	\$80.95	\$72.95
150931 Camera board	0.05 79	.95	71.95	64.95
174705 2.5mm lens 1	30° 0.02 24	.95	22.49	19.95
159062 6mm lens 56	° 0.03 24	.95	22.49	19.95
159071 8mm lens 38	3.6° 0.02 24	.95	22.49	19.95

SONY Color PC Board CCD Camera

Sony Chipset

- 380 line resolution
- NTSC format
- (510H x 492V) Signal to noise
- ratio: >48dB



- Sensor: Sony 1/3" interline transfer CCD
- · Auto electric shutter: 1 to 1/100,000 sec. linear
- · Lens: 3.6mm / F2.0 · Focus range: 10mm to infinity
- · Automatic gain control · Automatic white balance
- Video output: 1Vp-p, 75Ω (mating connector BNC
- type: P/N 135618 pg 66) (2) 9" wires w/ 2-pin Molex type keyed connector to
- board and stripped and tinned on one end (1) 3" wire harness w/ 15-pin Molex type keyed connector to board
- Requires: center positive 12VDC @ 150mA (P/N 149340 pg 89) (mating connector: P/N 28767 - pg 87) Recommended: transformer P/N 100095 - pg 89
- Size: mother card: 2.3"L x 1.7"W; analysis card: 2.0"L x 1.7"W; sensor card: 1.7"L x 1.1"W x 1.0"H
- Lens: 3.6mm FOV: 92.6° Weight: 0.2 lbs. Description 139571 Color camera board\$199.95 \$179.95

JAMECO Color CMOS Camera Board

NTSC Format

- 1/3" CCD image sensor
- 330 TV lines
- 5.0 lux FOV: 92°
- 3.6mm lens/F2.0
- · Low power consumption
- · Automatic exposure, gain and white balance
- Size: 1.0"L x 0.9"W x 1.1"H Weight: 0.01 lbs.

art No.	Description	1	10	
71011	Camera board\$5	9.95	\$53.95	

JAMECO Mini Enclosed Color **NTSC Camera Board with Lens**

- 1/4" CCD image sensor
- · NTSC system with 512H x 492V
- · 330 horizontal TV lines
- 2 Lux / F2.0 FOV: 106°
- Electronic shutter: $NTSC - \frac{1}{60} \sim \frac{1}{96,000} sec$
- Lens: 3.6mm / F2.0 Signal to noise ratio: 46dB
- Recommended P/N 100853 (9VDC @ 500 mA pg 89)
- Scanning system: 2:1 interlace
- Video output: 1V p-p composite video / 75Ω
- · Includes mounting hardware and cable
- Size (enclosure): 1.2"L x 1.2"W x 0.7"D
- · Weight: 0.9 lbs. · One-year warranty

Part No. Description

168575 Miniature enclosed camera....\$149.95 \$134.95

SONY Enclosed Color Camera

Sony Chipset

- 1/3" Sony super HAD CCD image sensor
- · NTSC system with 510 (H) x 492 (V)
- · 380 horizontal TV lines
- 0.2 LUX/F2.0 FOV: 92.6° · Signal to noise ratio: >48dB
- · Auto electronic shutter speed: 1/60 to 1/100,000 sec.
- Video output: 1V p-p composite video / 75Ω
- Requires 12V @ 220mA center positive power supply (not included, P/N 162996 - pg 89)
- · Includes mounting hardware
- Size: 1.9"L x 1.9"W x 1.0"H Lens: 3.6mm
- Weight: 0.4 lbs.
 One-year warranty

Part No. Description 153867 Enclosed color camera\$199.95 \$179.95

JAMECO Mounting Brackets for **Enclosed Camera**

- · Material: plastic
- · Base mounted w/ 3 screws
- Swivel angle: 360°
- · Tilt angle: 90°
- · Compatible with all Jameco enclosed cameras





174713

· Max load: 11 lbs. 170982: • Color: white · Max load: 6.6 lbs.

174713: • Color: black 6.4 0.3......\$4.95 \$4.49 6.25 2.0 0.2.....**6.95**

Part No. Product No. Ht. (in.) Wt. (lbs.) 171002 15-B002L 170982 15-B004 174713 15-B008 5.4 0.1....**9.95** 8.95



JAMECO Black and White Lighted Infrared Camera

EIA Format

- · Adjustable camera lens
- · 6 infrared LEDs for night vision
- · Scanning system: 2:1 interlace
- · Horizontal sync. freq.: 15.734kHz
- 380 TV line resolution FOV: 92°
- Video output: 1V p-p; 75Ω
- 0.1 lux with F2.0 Lens: 3.6mm
- · Includes 12VDC @ 500mA center positive power supply and wall mounting bracket

169607

P/N 169607: • Compatible with P/N 161752 (pg 158) • 2.4GHz · 4-channels jumper configurable

- · Audio output: 2V p-p max.
- Size: 2.8"L x 2.1"W x 2.1"H Wt: 1.3 lbs.

P/N 150404: • Auto iris controlled

- · Built-in voltage regulator
- Matching connectors: RG59 BNC (P/N 71271, pg 66)
- Operating voltage: 12-15VDC One-year warranty
- Size: 2.9"L x 2.0"W x 2.0"H · Weight: 1.2 lbs.

Part No.	Description 1	10
169607	2.4GHz infrared camera\$179.95	\$159.95
150404	Infrared lighted camera134.95	129.95

JAMECO Enclosed CCD Color **Camera with Audio Microphone**

NTSC Format

- Pick-up device: 1/4" CCD image sensor • FOV: 92°
- · Picture elements: 512(H) x 492(V) lines
- · Horizontal resolution: 330 lines
- · Minimum illumination: 2 lux
- · Horizontal sync. frequency: 15.734kHz
- Vertical frequency: 60Hz Lens: 3.8mm / F2.0
- Scanning system: 2:1 interlace
- Video output: 1V p-p, 75Ω Audio output: 2V p-p max.
- · Requires 12V regulated power supply

Part No. Description 169404 Enclosed camera w/ audio \$149.95 \$134.95

. IAMECO 4-Channel 2.4GHz

NTSC Format

- Output impedance: 50Ω typical
- video; BNC connector
- Audio input: 2Vp-p maximum
- · 4 channel jumper selectable at the back of unit
- Output pwr: 10mW
- 1/4" DSP color CCD sensor

Order Toll-Free

24-hours a day 7-days a week!

- · Function chip on board
- Built-in 3.8mm board lens
- 12VDC @ 500mA center positive AC adapter • Size: 2.9"L x 2.2"W x 2.0"H · Weight: 1.6 lbs.
- 170991 2.4GHz color camera\$274.95 \$249.95

JAMECO 4-Ch 2.4GHz Wireless **Audio/Video Transmitter System**

EIA Format

- ISM band: 2.4-2.483GHz
- Four selectable channel transmitter and receiver
- · Audio response: 20Hz-20kHz
- Antenna mode: dipole (omnidirectional)
- Video output: 1V p-p/75 Ω composite video
- · RCA jacks for audio/video connectors
- Includes (2) 12VDC @ 500mA w/ 2.1mm x 5.5mm center positive plug, and patch cables • Wt. 3.3 lbs.

Transmitter: • Size: 3.5"L x 2.5"W x 1.1"H

- Input voltage: 12VDC @ 500mA
- Output voltage: 12VDC @ 300mA Receiver: • Size: 5.1"L x 4.0"W x 1.0"H

Input voltage: 12VDC @ 500mA

Part No. Description 169631 4-ch. wireless system......\$151.95 \$134.95

JAMECO Mini Dome Color Camera

NTSC Format

- 1/4" CCD image sensor
- 512(H) x 492(V)
- 330 horizontal line res.
- 15.73KHz horizontal synch. frequency • S/N ratio: 46dB
- Scanning system: 2:1 interlace
- Up to 1/96,000 second electronic shutter 3.6mm lens with F2.0 $\, \cdot$ Video output: 1Vp-p, 75 Ω
- Power supply: 12VDC @ 160mA • 2 lux/F2.0
- Includes mounting hardware • FOV: 92°

Size: 3.5"Dia. x 2.3"H • Weight: 0.5 lbs.

Part No. Description 171037 Mini-dome camera......\$154.95 \$149.95

IAMECO 4 Channel Matrix Switcher

.0000000

- · NTSC signal format
- Inputs: 4
- Video input/output: 1Vp-p, 75Ω
- Output: 2 selectable on screen
- Video gain: from attenuation to amplifier (0.8 to 1.4 Vp-p) • Video bandwidth: 2MHz (±3dB)
- Switching interval: 1 to 30 seconds selectable on screen · By-pass, scan, home selectable on screen
- BNC connector to video and RCA connector for audio
- Includes manual, remote control and 9VDC @ 200mA center positive power supply
- Size: 9.3"L x 4.7"W x 1.6"H Weight: 2.4 lbs.

Part No. Description 10 169228 4 channel switcher.....\$89.95 \$79.95

2.4GHz Wireless Antenna Booster **Extend Video Transmitting Distance**

- · Output power: 1 watt
- · Audio / Video booster
- · FM design
- Easy to install
- Impedance output: 50Ω typical (to antenna)
- Video output: 1Vp-p
- composite video; 75Ω (to camera)
- Requires 9VDC @ 400mA power supply · Used when increase in distance is needed

Description Part No. 174748 Antenna booster\$199.95 \$179.95

JAMECO Color and B&W CCD

- 1/3" Panasonic
- CCD image sensor
- Image size: 4.82mm (H) x 3.64mm (V)
- More than 380TV lines horizontal resolution
- 15.734kHz synchronous

frequency Scanning system: 2:1 interlace

- · BNC connector for video

- Auto iris: DC driver / AES / video driver switchable

Auto iris. De di ivei / video di ivei switchable		
Part No.	Description 1	10
171256	B&W CCD camera\$109.95	\$99.95
171248	Color CCD camera224.95	214.95

- 170931: without heater
- Clear window area: 2.5"W x 2.3"H • Indoor use
- Max. camera size: 4.0"L x 2.4"W x 2.4"H
- Size: 16.0"L x 4.9"W x 4.9"H Weight: 2.8 lbs.

- · Clear window area: 3.5"W x 3.1"H · Outdoor use

Part No. Description 170931 Camera housing......\$29.95 170940 Camera housing w/ heater 69.95

Quad Digital Color Video Processor

- NTSC
- signal format
- 4 with loop inputs
- Video input:
- 1Vp-p, 75Ω typical
- Video output quad: 2x1Vp-p, 75Ω
- Digital memory: 1024x512
- Zoom relay with 2x2 zoom definition
- Alarm inputs/outputs: 4/1 contact normally open (n.o.)/normally closed (n.c.)
- Switching interval: 0-99 seconds
- Day/time generator format: month/day/hour/min./sec.
- 8 character title display
 BNC video connections
- Includes manual & 24VAC @ 750mA power supply

• Size: 16.9"L x 9.5"W x 1.7"H • Weight: 8.1 lbs. Part No. Description

170974 Color video processor......\$399.95 \$369.95 JAMECO PCI Digital Audio/Video Recorder with Color Camera

4 Quadrants

- Digital motion image compression & storage
- FOV: 90°
- · Intelligent image motion detection
- Full playback functions Multiple hard disk capability · Adjustable image sizes, recording frame rates, and image quality
- · Weight: 4.4 lbs.
- Size: (camera) 2.9"L x 2.1"W x 2.0"H

Part No. Product No. 15DR001K......**\$349.95** 169341

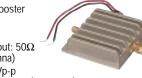


Wireless Color Camera

- · Video input: 1Vp-p composite

- · 2 lux illumination
- 330 TV lines FOV: 92° · Includes mounting bracket, manual and
- Description





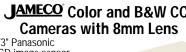












171248

S/N ratio: more than 46dB

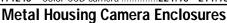
Video output: 1Vp-p; 75 Ω • FOV: 42.6 Requires 12VDC @ 140mA power supply (recommend P/N 162996, pg 90)

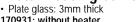
Size: 4.0"L x 2.2"W x 2.0"H • Weight: 0.9 lbs.

171256: B&W • 0.3 lux • 512(H) x 492(V) EIA signal format

171248: Color • 1.0 lux / F1.4 • 512(H) x 492(V) NTSC signal format

Auto iris: DC driver / video driver switchable





- 170940: with heater

Max. camera size: 6.5"L x 3.2"W x 3.2"H

Size: 11.0"L x 3.6"W x 3.6"H • Weight: 6.8 lbs

JAMECO 2.4GHz Wireless **B&W / Color CCD Camera**

- 1/3" CCD image sensor
- 380 TV lines
- 512(H) x 492(V)
- · Auto electronic shutter
- · Audio and video transmission
- · S/N ratio: more than 48dB
- Impedance output: 75Ωtypical
- · Video input: 1Vp-p composite video (75 Ω)
- Audio input: 2Vp-p maximum
- · Built-in 15VDC regulator and microphone
- · 4-channel jumper configurable
- Includes 15VDC power supply, antenna, mounting bracket, and manual

174764: B&W Camera

- EIA format: 0.1 lux / F1.2: 3.6mm lens with FOV: 92°
- Size: 3.6"L x 2.2"W x 2.1"H

174801

Lens not

Included

174764

· Weight: 2.0 lbs.

Lens not

Included

174828

Lens not

Included

174810

174801: Color Camera

- NTSC format; 2.0 lux / F1.2; LED power "ON" indicator; automatic gain control and white balance
- · Lens not included (recommend P/N 174799)
- Size: 4.1"L x 2.2"W x 2.1"H · Weight: 2.1 lbs.

174799: Lens

- 8mm lens with FOV: 42.6°; F1.8 (for P/N174801)
- · Weight: 0.1 lbs.

Part No.	Description	1	10	
174764	B&W camera	\$179.95	\$161.95	
174801	Color camera	.299.95	269.95	
42 6° Lens for P/N 174801				

42.6 Lens for P/N 1/4801

Part No.	Description	1	10	25
174799	8mm lens	.\$74.95	\$71.95	\$64.95

JAMECO 2.4GHz Wireless B&W / Color CCD Camera

With AES/AI Video Drive

- 1/3" CCD interline sensor
- · 380 Horizontal TV lines
- 512(H) x 492(V)
- · Scanning system: 2:1 interlace
- · Auto electronic shutter (AES) : 1 to 1/100,000 sec
- · Auto iris (AI) control video drive switchable
- · S/N ratio: more than 48dB
- Video output: $1Vp-p / 75\Omega$
- Impedance output: 75Ω typical
- · LED power "ON" indicator at rear panel
- Includes 15VDC power supply, antenna, mounting bracket, and manual
- · Weight: 2.1 lbs.
- Size: 4.0"L x 2.2"W x 2.0"H
- · Lens not included (recommend P/N 174799, above)
- 174828: B&W; EIA format; 0.1 lux / F1.2 174810: Color; NTSC format; 2.0 lux / F1.2

Part No.	Description 1	10
174828	B&W camera\$199.95	\$179.95
174810	Color camera349.95	314.95

JAMECO Color CCD Interline Camera

Water Resistant w/ Adjustable Mounting Bracket Still and Streaming Video Capable

- · EIA format
- 1/3" CMOS image sensor
- EIA format: 512H x 492V
- 330 Horizontal line resolution 2:1 scanning interlace system
- Mini illumination: 5 lux
- Video output: 1V p-p; 75Ω 6mm lens / F2.0
- S/N ratio: 40dB
- FOV: 530 Electronic Shutter: 1/60 - 1/1,200 sec.
- Connectors: 1 standard RCA female jack for video, and in-line 2.1mm power plug connector for power supply
- Requires 12VDC @ 40mA center positive power supply (recommend P/N 162996, pg 90)
- Includes adjustable mounting bracket and instruction sheet
- Size: 2.6"L x 0.9"Dia. Weight: 0.4 lbs.

Part No.	Description 1	1
185017	Color camera\$99.95	\$89.9

JAMECO 4-Channel 2.4 GHz Wireless Audio/ Video Receiver and 10mW Transmitter

FCC Compliant

Make your camera wireless up to 495 feet!

- · Output power: 10mW
- Output impedance: 75Ω typical
- Video input: 1Vp-p composite video, BNC connector
- Audio input: 2Vp-p maximum
- Transmission range: 495' (150 meters) outdoors 198' (60 meters) indoors 4 channel selected by
- rotary switch on transmitting unit
- Built-in sound and mute function, screen timecontroller, channel auto scanning and channel locked function on receiver
- Receiver compatible with adapter (P/N 114788, pg 66)

161752

Includes user's manual, antenna, mounting hardware for transmitter, 15V @ 350mA power supply and cables • One year warranty

161744:	 Size: 4.0"L x 3.0"W x 1.5"H 	• Wt.:	1.3 I	bs.
161752:	• Size: 7.5"L x 5.0"W x 1.3"H	• Wt.:	2.5 I	bs.
Part No.	Description	1		10
161744	4-channel 2.4GHz transmitter	99.95	\$89	.95

161752 4-channel 2.4GHz receiver **124.95 120.95**

JAMECO 10" Black and White **Security Monitor with Audio**

EIA Format

- Input voltage: 120VAC @ 60Hz (2-prong 5' cable)
- 9" viewable screen
- · Resolution: 700 line resolution
- · LED indicator for power
- Push down front panel for vertical hold and size, brightness, volume,
- and contrast adjustments, power on/off switch Horizontal frequency, focus, and sub-brightness adjustment, impedance input switch, (1) BNC female & (1) RCA jack for audio/video input/output at rear
- panel Includes instruction manual • Size: 9.4"W x 9.5"D x 8.9"H • Weight: 14.3 lbs.

Part No.	Description 1	1
169623	10" black & white monitor \$109.95	\$99.9

JAMECO USB PenCam **Digital Camera**

- USB Interface
- Compatible with Windows® 98/ 2000 and ME
- High resolution 352 x 288 (20 still shots)
- · Low resolution
- 176 x 144 (80 still shots)
- Up to 12 seconds of AVI streaming video
- Up to 2 hour battery life (full time usage)
- · 10 second self timer
- · Requires (2) AAA batteries (not included)
- Includes CD-ROM software bundle, 5' USB cable, camera stand, and camera clip
- CD-ROM software bundle includes Pocket Cam Manager, Photo Express 3.0, Photo Explorer 3.0, COOL 360 1.0, Video Live Mail Plus 3.11b, and Microsoft Net Meeting 5.0
- Size: 4.8"L x 1.3"W x 0.8"D Weight: 0.4 lbs.
- One-year warranty

Part No.	Description 1	10
177199	Digital PenCam\$89.95	\$79.95

JAMECO 2.4GHz High Gain **Directional Antenna**

- · Indoor and outdoor use
- · Gain: 8.5dB

161744

- Impedance: 50Ω
- · Weatherproof and corrosion resistant
- Distance: 150 300ft.
- (open area) Frequency range: 2300 - 2500MHz
- · Cable: RG58/U with SMA male connector
- · Connector: SMA male · Cable length: 0.8 ft.
- · Includes mounting hardware
- Size: 4.8"W x 4.8"H x 2.8"D
 Weight: 0.7 lbs.

Description 2.4GHz antenna**\$99.95 \$89.95 \$79.95**

JAMECO 2.4GHz SMA RF Antenna

Unidirectional

- · For use with 2.4GHZ cameras. transmitters, and receivers
- · Compatible with P/N 174756 (above)
- Unidirectional Gain: 3dB
- · SMA male • Size: 3.6"L

Part No. Description 2.4GHz antenna\$12.95 \$11.49 179864

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176524

□T■K Wireless Transceiver (RF) with RS-232 And PC Software

Overall specifications:

- · Voltage input: 5VDC
- · Transmit current: 20mA
- Receive current: 10mA
- · Max# of nodes: 15
- · Sleep current: 2mA

RF section:

- · Operating frequency: 916.5MHz
- · Data rate: (RF) On-Off Keyed: 19.2KB
- Max. peak transmit power: 1mW
- · Receivers gain: 100dB
- · Auto transmission: 32 char.
- · Telemetry: every 30 char.
- Indoor / outdoor range: 100ft / 300ft

RS Section:

- TS232C/485/TTL: 19.2Kbps
- · TTL/CMOS: 1 load
- · Characters: any
- · Handshake: none required
- · Settings: 8N1
- 176

rt No.	Product No.	1	10
6508	TR200B	\$124.95	\$112.95

□T■K Wireless Transceiver (RF) with RS232 Port and PC Software

Plug and Play

Overall specifications:

- · Voltage input:
- 120VAC with included power supply
- · Transmit current @ 5VDC: 20mA
- Receive current @ 5VDC: 10mA

RF Section:

- · Operating frequency: 916.5MHz (± 0.2MHz)
- · Data rate (RF): On-Off Keyed: 19.2KB
- · Max. peak transmit power: 1mW
- · Receivers gain: 100dB
- · Auto transmission: 79 characters
- · Telemetry: every 30 characters
- · Indoor / outdoor range: 100ft / 300ft

RS Section:

- · RS-232C: 19.2Kbps
- · Characters: any
- Handshake: none required
- Settings: 19200, 8N1

Part No. Product No. 176516 TR300B......\$194.95 \$175.95

□T≡K Wireless (RF) Transceiver with TTL I/O Module

Economical and effective in transceiving streams of data at high rates over a short distance with minimum power consumption lending itself to battery operated products.



- · Operating frequency: 915.6MHz (± 200KHz)
- · Modulation: On-Off Keyed
- · Data rate: On-Off Keyed: 19.2KB
- Sleep current: 25uA Receive current: 6mA
- Transmit current: 12mA Voltage input: 5VDC
- · Peak transmit power: 0.85mW
- · Indoor / outdoor range: 100ft / 300ft

Product No. \$67.49 **176495** TR101\$**74.95**

□T≡K Wireless (RF) Fail Safe Alarm-Controller

General specifications:

- RF operating frequency: 433.92MHz
- · Modulation: On-Off Keyed
- Programmable codes: 255 (internal



- Power input: 120VAC (+/- 20%) 50-60Hz
- 9V battery back up

Receiver Specifications: (FS002400)

- · Same specifications as transmitter
- · Relay: SPST N.O. 50mA/120VAC resistive

Part No.	Product No.	1	10
176524	FS001400	\$124.95	\$112.49
177201	FS002400	124.95	112.95

Pan/Tilt Controller Box

With Zoom Lens Control

- · Input voltage: 115VAC
- Single joy pad and auto pan control for manual and auto pan operations



- Iris, focus, and zoom paddle switches for manual and auto pan operations
- · For use with P/N 179899 pan/tilt mechanism (below)
- · Lens connectors: screw down terminals
- · Pan/tilt connectors: 8P mike connector
- · Power consumption: 8.5 watts
- Size: 8.6"W x 7.9"D x 1.6"H Weight: 4.0 lbs.

Part No.	Description 1	10
179881	Pan/tilt controller box\$119.95	\$107.95

Indoor Pan / Tilt Mechanism

Continuous Pan

- · Input voltage: 115VAC
- · Auto mode for continuous pan
- Angular travel pan: 355°
- Angular travel tilt: +/- 60° (up/down)
- Externally adjustable limited switch
- Pan speed: 6°/second
- Tilt speed: 3°/second
- · Maximum load: 11 lbs. · Weight: 4.6 lbs.
- · Use P/N 179881 for controller box (above)
- Size: (overall dimensions) 7.5"H x 6.2"W x 5.4"D Description

Pan/tilt mechanism......\$249.95 \$224.95 179899

JAMECO Wireless Component **Extension Cable**

- RG330
- · For wireless camera and receiver
- Connects your booster to antenna

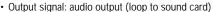


- SMA male to SMA female connectors · Weight: 0.3 lbs. · Length: 8"
- See page 158 for cameras and receivers Description Part No.

Wireless extension cable ...\$12.95 \$11.49

PCI TV Capture Card with Remote Control

- System requirements: IBM compatible Pentium® 90MHz or higher, 8MB of RAM, Windows® 95, SVGA graphics card
- Can be used for video conferencing
- Input signal: 75Ω coaxial TV antenna, S-Video, composite (RCA) video, remote sensor, philips camera input (CVBS)



- 181 channel cable ready TV tuner function
- Resizable TV window from icon size to full screen
- · Supports NTSC / PAL video input
- · Includes user's manual, cables, remote control (battery included), and CD-ROM drivers
- Size: 4.9"L x 3.9"H Wt.: 1.2 lbs. One-year warranty

Part No.	Description	1	10	25
152881	PCI TV capture card	\$89.95	\$80.95	\$72.95

JAMECO PCI Video Capture Card

- System requirements: Pentium® 100MHz or higher; available PCI slot: Windows® 95/98: VGA card with DirectDraw support
- Supports RGB 32, 24, 15 formats
- · AVI compatible · Supports video conferencing applications
- · One-year warranty · Plug and Play
- · Includes instruction manual, and drivers on CD-ROM
- Size: 4.8"L x 22"W Weight: 0.3 lbs.

Part No. Description

172793 PCI video capture card \$54.95 \$49.95 \$44.95 **AMECO[®] Video Capture Card** with Camera

· Minimum system requirements: Windows® 95 or better; Pentium 133MHz or better; 16MB of RAM; 46MB hard disk space, 4X CD-ROM; PCI video board with 2MB of memory; 640 x 480 display with 8-bit color depth; available PCI slot



- For better results recommend Pentium MMX® 233MHz; 32MB RAM; 800 x 600 display with 16-bit color depth; sound card; microphone; speakers (for audio and video capturing) ISP, 56K V.9 modem
- Plug and play PCI specification version 2.1 compliant
- CIF (common interlace format) for image capturing
- True motion codec (compression and decompression) NTSC/PAL/SECAM composite video capture at a full
- 640 x 480 resolution with 24-bit color depth Capture and compress video at rates of 30fps
- (frames per second) Provides real time images Video conferencing; video messaging; editing, video
- conferencing; and manipulation software suite · Includes manual on CD-ROM, CD-ROM drivers, and camera
- Size: 4.8"L x 2.2"W · Weight: 0.8 lbs. Part No. Description

Video capture card \$79.95 \$69.95 \$62.95 180110



160 Audio and Video Products

ProPC to TV Converter Box

- · Converts VGA video to standard NTSC and Macintosh® 640 x 480 to standard NTSC
- · Built-in flicker filter
- Resolution: 800 x 600
- · Color: gray
- · System requirements: VGA-based PC, DOS 3.0 or higher, 640KB RAM or larger • TV brightness control
- · Compatible with Microsoft® Windows® 3.0 and higher
- · Package includes: compact PC to video converter box, transformer, utilities diskette, cables, and instruction manual · Weight: 2.2 lbs.
- Size: 6.0"L x 4.0"W x 1.0"H
 Two-year warranty Part No. Description 167193 Video signal pro **400 05**

67193	Video signal pro	\$99.95	\$89.95
Audi	io/Video Adapte	ers (CAT 5	UTP)

- · Designed to convert impedance of video/audio signals to 100Ω for transmission over CAT 5 UTP cable Supports both NTSC or
- PAL video signals · Built-in impedance matching device and filter for video and audio
- signal transmission Use with existing premises wiring and wall jacks for
- easy and cost effective installation · Range: 1000' color video, 2000' for B/W video
- 155070: Signal pair: video (BNC), CAT pair 1 (RJ45) **155002**: • Signal pairs: video (BNC), CAT pair 4 (RJ45); audio 1 (RCA), CAT pair 3 (RJ45); audio 2 (RCA), CAT pair 2 (RJ45)
- · Includes 1 RCA to BNC adapter, 2 mounting screws

Part No.	Conn. Type	Wt. (lbs.)	1	10
155070	BNC/RJ45	0.1	.\$27.95	\$24.95
155002	BNC/RCA/RJ45	0.3	41.95	36.95

SMK 12VDC RF Modulator

MFG. #: WMN2144-01

- · Output frequency: NTSC Ch. 3/4, switch selectable 12VDC RF Modulator
- · Operating voltage: 12V@ 50mA max.
- · RF output impedance: 75 Ω (F-type connector)
- · Video modulation: 1.0V p-p
- · Audio FM deviation: 1.4V p-p
- · PC connections: solder tab connectors
- Size: 1.7"L x 1.7"W x 0.7"H Weight: 0.1 lbs.

Part No.	Description	1	10	50	100
141639	RF modulator	.\$4.95	\$4.49	\$3.95	\$3.25

JAMECO Multimedia **Speaker System**

With 3D True Sound

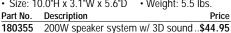
- Input voltage: 120VAC @ 60Hz
- · Output power: 240 watts
- · Self-amplified
- · Magnetically shielded speakers
- · 2-channel stereo amplifier
- · Power and volume control, tone control, 3D power on-off button
- Size: 7 2"H v 3 5"\M v 4 7"D • Mojaht: 2.7 lbc

· SIZE. I	.Z 11 X J.J VV X 4.7 D	· Weight. 3.7 ibs.
Part No.	Description	Price
180380	240 watt speaker sys	tem\$44.95

JAMECO Multimedia Speaker System

With 3D Sound

- · Input voltage: 120VAC@60Hz
- 200 watts
- 2-channel speaker system
- Magnetically shielded Power LED
- 3D button switch, volume / tone knob adjustment
- Size: 10.0"H x 3.1"W x 5.6"D



JAMECO 120 Watt Multimedia **Amplified Speaker System**

- Input voltage: 120VAC@60Hz
- 120 watts
- 2-way speaker system: 4" woofer and 2" tweeter
- · Magnetically shielded
- 4Ω impedance
- Power LED, volume / bass/ treble adjustment knobs
- · Includes cable

 Size: 1 	0.5"H x 6.0"W x 6.2"D	 Weight: 8.6 	lbs.
Part No.	Description	1	1
180363	120W speaker systen	n\$ 49.9 5	\$44.9

JAMECO 120 Watt Multimedia Speaker System

With True Sound

- · Input voltage: 120VAC@60Hz
- · 2-channel stereo amplifier
- · Output power: 120 watts
- Magnetically shielded speakers
- Full range response
- Produces high quality stereo sound for your PC
- Power button, volume control, LED power indicator, and earphone plug
- Size: 8.6"H x 2.2"W x 3.9"D

Part No.	Description	Price
180371	120W speaker system	\$34.95

JAMECO 160 Watt, 2 Channel Stereo Self-Amplified Speakers (Pair)

- Input voltage: 120VAC
- Self-amplified
- Magnetically shielded
- 2-channel stereo amplifier
- Knob controls for volume. bass, and treble
- · Push button type power switch with LED indicator

		1 1	_	M_11	1	Λh.		I	CT.		_
1803	304	160	W s	speaker	`S	\$39.	.95	\$35.	95	\$31.	9
Part I							1				-
 SIZ 	œ: 5.	5"VV	Χ/.	3 X U"U.	3.5"H	•	we	ight:	7.3	IDS.	

14.5 Watt, 2 Channel Stereo Amplified Speakers (Pair)

- 14.5W (RMS) self amplified per set (2)
- Headset jack
- Volume controls
- Includes 9VDC Class 2 transformer
- Weight: 2.7 lbs.

 Size: 2.9"W x 4.7"D x 7.2"H Description 10 14.5W speakers\$12.95 \$11.49 \$9.95



Fits 5.25" Bay

- 8Ω speakers with frequency response of 250Hz to 20kHz @ 83dB
- Compatible with all sound boards, CD-ROMs, CD

digital audio players and MPC systems Size: 5.8"W x 7.5"D x 1.7"H • Weight: 1.4 lbs.

Part No. Description Self amplified speakers......\$69.95 \$59.95 153541

COBY_® Omni-Directional Microphone Headset

- · Frequency range: 20Hz to 20KHz (headset); 50Hz to 16KHz (microphone)
- Impedance: 32Ω (headset); low (microphone)
- · Maximum power: 100mW
- Sensitivity: 98dB (headset); -62dB (microphone)
- · Swivel microphone arm pivot
- Flexible microphone arm 6' cord
- 1/8" phone jacks (2) Weight: 0.3 lbs.

Part No. Description 153875 Microphone headset .. \$12.95 \$11.49 \$9.95

Omni-Directional Microphone Headset

- · Freq. range: 200 to 6KHz (headset); 20 to 6KHz (microphone)
- · Swivel microphone arm pivot
- · Flexible microphone arm
- · Connector: 3.5mm stereo plug (2)
- 8' cord Weight: 0.3 lbs. One-year warranty Description

132302 Microphone headset\$11.95 \$9.95

Mono Microphone Condenser

Unidirectional

- · Type: electret condenser
- · Cord length: 20'
- Connector: 2.5mm male
- right angle molded plug Sensitivity: -67dB (± 3dB)
- Impedance: 600Ω (± 30%)
- Frequency: 150-8kHz Voltage type: 1.5VDC
- Current consumption: 550µA (max.)
- · Jacket color: black

Part No. Description 169017 Microphone condenser \$1.75 \$1.49 \$1.25

Desktop Microphone

- · Connector: 3.5 mm male stereo plug
- · Neck length: 17.5"
- · Cord length: 5.5'
- · Weight: 0.1 lbs.

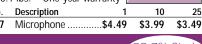
One-year warranty

Part No. Description 129963 Desktop microphone ...\$4.95 \$4.49 \$3.95

Hands-Free Condenser Microphone

- · Connector: 3.5mm male stereo plug
- · Cord length: 8'
- Size: 1.9"L x 1.2"W x 0.3"H • Wt.: 0.1 lbs. • One-year warranty





Hard Drives, Software and Accessories 161

SCSI / IDE Hard Drives and Mounting Kits

PC/XT/AT and Compatibles

- TPI (Track Density): 1150
- · Requires host IDE adapter

 Drives ove 	r 528MB requ	uire EIDE controller	A STATE OF THE PARTY OF THE PAR		1	Name of	1
	, ,	, we carry Seagate,	124978				
Western Di	igital and IBM	. Call for availability.	1247/0	180857			117217
Part No.	Capacity	Description	Weight (lbs.)	Speed	Warranty	·	Price
137306	528MB	2.5" IDE for portable	0.5	14 ms	3 mos.		\$99.95
113751	210MB	3.5" IDE	1.6	14 ms	3 mos.		69.95
115764	425MB	3.5" IDE	1.7	12.5 ms	3 mos.		79.95
118949	850MB	3.5" IDE	1.7	14 ms	1 year .		84.95
124978	1.27GB	3.5" IDE	1.1	14 ms	1 year .		89.95
146325	1.7GB	3.5" IDE (Fast ATA-2)	1.1	12 ms	1 year .		99.95
146333	2.5GB	3.5" EIDE (Fast ATA-2)	1.0	11 ms	1 year .		109.95
151036	3.2GB	3.5" EIDE (Ultra DMA33)	1.1	11 ms	1 year .		114.95
151044	4.3GB	3.5" EIDE (Ultra DMA33)	1.1	11.5 ms	1 year .		119.95
151052	6.4GB	3.5" EIDE (Ultra DMA33)	1.1	9.5 ms	1 year .		129.95
162261	8.45GB	3.5" EIDE (Ultra DMA33)	1.2	9.5 ms	1 year .		139.95
Part No.	Product No.	Description	Weight (lbs.)		1	10	25
180857	HDB35	3.5" hard drive mounting kit (s	short) 0.2		\$4.95	\$4.49	\$3.95
117217	HDMK	3.5" hard drive mounting kit	0.6		.7.95	7.25	6.49

JAMECO Removable **HD Rack and Insert**

- · Removable storage for 3.5" IDE
- · Power LEDs
- · Air-vents
- · Keylock for security
- One-year warranty

· Weight: 1.2 lbs.

129816 129816: Size: 5.8"W x 8.5"D x 1.5"H

 SCSI racks and inserts available Insert Enclosure for Removable Rack:

135861: • Size: 4.1"W x 7.5"D x 1.6"H • Wt.: 0.8 lbs.

· Includes inner cable with IDE connector

Part No.	Description	1	10	25
129816	Rack, IDE drives	27.95	\$24.95	\$22.49
135861	Inserts (IDE) for 129816	19.95	17.95	13.95

Quicktech '98 **ULTRA-X** Diagnostic Software

Self-booting software for 386, 486 and Pentium®/II/ MMX/III/AMD Athlon

· Verify proper operation and troubleshoot failures of all major PC components: hard drives (MFM, RLL, IDE, SCSI);



floppy drives; base, extended and external cache RAM; VGA/EGA/VESA – compliant video cards; keyboard; monitor; printer; and I/O ports

- 48 hour burn-in mode for lengthy testing
- Floppy drive head cleaning function
 Wt.: 0.5 lbs.
- Includes loopback testers for DE9 and DB25 serial and DB25 parallel ports, manual and 3.5" disk

Part No. Description 134826 QuickTech '98 software.....\$129.95 \$116.95

JAMECO Hard Drive Cooling Fan

- · Type: sleeve axial fan
- 3.5" drive bay mountable (includes mounting screws) • Power: 1.8 watts
- · Airflow: 32 CFM, exhausts hot air from case through front panel vent
- · Noise ratio: 26 dBa
- · Operating voltage: 12VDC @ 200mA
- · 9.5" wires with 4-pin molex type power connector
- Size: 4.9"L x 4.0"W x 1.0"H · Weight: 0.3 lbs.

Part No. Description **152258** HD-300 cooling fan **\$11.95 \$10.95**

Check out our external mass storage cabinets on page 169!







IDE Removable 5.25" Rack Kit for 3.5" Hard Drive with Fan

- Removable storage for 3.5" hard drives
- LED for power and hard drive activity
- CFM rating: 5.6
- (1) 12VDČ @ 50mA fan Retaining lock mechanism
- Includes mounting hardware
- Size: 5.9"W x 8.7"D x 1.6"H
 Weight: 1.3 lbs.

Part No. Description 170608 IDE removable rack kit\$29.95 \$26.95

JAMECO° 5.25" Bay IrDA Infrared Transceivers

Transfer data, without a cable or disk, between your PC and many IrDA-compliant devices such as



code scanners, etc. · Fast 115.2 kbps transfer rate in both directions

- Plug-N-Play under Windows® 95/98
- Supported by LapLink 7.5 for wireless remote access
- Wireless data transfer up to 6 feet
- · Includes manual, cable, screws and software Size: 5.8"W x 1.7"H • Weight: 0.4 lbs.

Part No. Description 10 \$49.95 158094 5.25" bay infrared trans. ...\$54.95

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iomega 100MB IDE ZIP Drive

Includes

ZIP disk and

drivers!

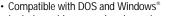
- · 100MB capacity per disk
- · Average seek time: 29ms
- · Transfer rate: 1.4MB/sec.
- IDE interface
- · Buffer size: 16K · Fits in standard
- 3.5" drive bay OS: Dos 6.xx, WIN 3.1/95/NT
- · Includes ZIP disk and ZIP drivers (CD-ROM)
- Weight: 0.9 lbs.
 One-year warranty

Part No. Description 149593 ZIP drive (disk and drivers) ..\$114.95\$110.95

↑TEN 3.5" Portable External **Parallel Port Hard Drive Enclosure**

- · Use on any computer with a parallel port
- · Use with IDE drives
- Allows hard drive to be set up to a parallel port at the same time and is

transparent to the user



- Includes cable, manual and carrying case
- · Enters power save mode after 20 minutes idle time
- · Includes 120VAC external power adapter
- Size: 8.8"L x 5.3"W x 1.5"H Weight: 4.5 lbs.
- · One-year warranty

Part No. Description 129699 3.5" external HD enclosure .. \$89.95 \$79.95

Matsushita 120MB 2X Floppy Drive

- · 120MB capacity per disk
- · Average seek time: 70ms typical
- Transfer rate: 750 - 1360 KB/sec from disk
- · IDE interface
- · Full read and write compatibility with standard floppy disks (1.44MB and 720KB)
- Fits standard 3.5" drive bay
- Includes: 3.5" drivers, 120MB tools disk, and manual
- Size: 6.1"L x 4.0"W x 0.9"H · Weight: 2.0 lbs.

Part No Description 174019 120MB 2X Floppy Drive.....\$119.95

SCSI Type / Connector Reference Table

SCSI Type	Internal Connectors	External Connectors
Wide SCSI III	High density 68-pin male/female	High density 68-pin or very high density 68-pin centronics
Fast SCSI	50-pin header	High density 50-pin male/female
Fast SCSI	Low density 50-pin male/female or 50-pin header	Low density 50-pin male/ female
Ultra SCSI II	50-pin high density male/female	High density 50-pin male/female
Fast SCSI II	50-pin header or 50-pin high density male/ female	High density 50-pin male/ female or low density 50-pin male/female
Ultra2Wide SCSI III	High density 68-pin connector male or female	High density 68-pin male/female
Ultra Wide SCSI III	High density 68-pin connector male or female	High density 68-pin male/female







Sound Cards, Floppy & CD-ROM Drives and Accessories

CREATIVE ISA 16-Bit Sound Card

Blaster AWE 64

· System requirements: Pentium® 90MHz or better; 11MB of disk space; 8MB of RAM; Windows® 3.1X/95; MS-DOS 5.0



- · Plug and play compatible
- Sound blaster music synthesizer compatible
- · Advanced wave effects synthesizer with 1MB ROM of general midi samples • 512KB built in DRAM
- · Full duplex stereo digitized voice channel
- · High and low DMA channels using a single interrupt for audio recording and playback
- · Includes manual and CD-ROM drivers
- Size: 7.2"L x 4.1"W Weight: 0.6 lbs.

Part No.	Description 1	10
163715	16-bit sound card\$44.95	\$39.95

JAMECO PCI Sound Card with Wavetable

YMF724F-V chipset

· System requirements: Pentium® 100MHz or faster; 16MB of RAM or more; available PCI slot; Windows® 95; 15MB hard disk space; CD-ROM drive



- · PCI 2.1 compliant
- · PC '97/98 specification compliant
- · PCI bus power management rev. 1.0 compliant
- · PCI bus master for PCI Audio: true full duplex playback and capture; direct sound / direct music hardware acceleration
- · Legacy audio compatibility
- · Supports Yamaha AC-3 device
- · Single crystal operation
- 5V power supply for I/O and 3.3V power supply for internal core logic
- Input jacks for line-in / mic / audio output; 15-pin port for joystick

• Size: 5.0"L x 3.4"W		 Weight: 0.5 lbs. 		
Part No.	Description	1	1	
19/1959	PCI sound card	\$20.05	\$26.0	

JAMECO 3.5" Drive Mounting Kits

•	For mounting a
	3.5" floppy
	drive into a
	5.25" slot



· Includes beige faceplate (AT gray)

32088 · Compatible with Teac drive (P/N 115490 - above) · Weight: 0.5 lbs. Part No. Description 32088 Drive mounting kit\$6.95

JAMECO Disk Drive Mounting Rails

· Includes all necessary mounting hardware

181227 Mounting brkt (2 pcs).....2.95

- · AT and compatibles
- · 8 mounting holes · Weight: 0.04 lbs.

Part No. Description 10 100 34323 Mounting rails (2)\$1.09 \$.99 \$.89

SONY 1.44MB 3.5" Internal Floppy Disk Drive

Without Bezel

- · IBM PC/XT and higher compatible
- 1.44MB, 3.5" double sided, high density
- Size: 4.0"W x 5.9"D x 1.0"H
- · Weight: 0.8 lbs.

Part No. Product No.	Manufacturer	1	10
176284 MPF520-7	Sony	.\$24.95	\$22.49

SONY 1.44MB 3.5" **Internal Floppy Disk Drive**

- · IBM PC/XT and higher compatibles
- · Color (faceplate): beige
- · 1.44MB, 3.5", doublesided, high density
- Size: 4.0"W x 5.9"D x 1.0"H
- · Weight: 1.4 lbs.

Part No.	Product No.	Manufacturer	1	10
118922	JU257	Sony	\$34.95	\$29.95

TEAC. 1.44MB 3.5" Internal Floppy Disk Drive

- · IBM PC/XT and higher compatibles
- · Compatible with DOS versions 3.3 or higher
- Automatically determines if disk is high or low density
- · Formatted high density mode
- Size: 4.0"W x 5.9"D x 1.0"H (actual drive size)
- . Majaht, 1.2 lba

· weign	i. 1.5 ibs.	- One-year war	ranty	
Part No.	Product No.	Manufacturer	1	10
115490	FD235	Teac (1.44MB)	\$34.95	\$31.49

IBM 360KB & TEAC 1.2MB 5.25" Internal Floppy Disk Drives

· IBM PC/XT and higher compatibles

Size: 5.8"W x 8.1"D x 1.6"H

126957: double-sided. faceplate

· Weight: 3.9 lbs.

17101: double-sided, high density, gray faceplate

· Weight: 2.2 lbs

One-year warranty Part No. Product No. Manufacturer

IBM (360KB)......\$34.95 \$29.95 **126957** 6450207 Teac (1.2MB)......39.95 35.95

AMECO External CD-ROM Cases

- SCSI-I or IDE interface
- Streamlined appearance
- Metal body with plastic front panel RCA jack
- SCSI-ID address selector on SCSI model (for P/N 126391) 50 watt universal switching power supply
- Size: 6.5"W x 11.8"D x 2.0"H Weight: 3.8 lbs. • P/N 129710: One-year warranty **126391:** Use cable (P/N 73162, pg 182) for connections

Part No.	Description	1	1
126391	SCSI CD-ROM external case\$49	.95	\$44.9
129710	IDE CD-ROM external case79	.95	71.9

Internal CD-ROM Drives

- · 5.25" half-height design
- · Interface/type: ATAPI/EIDE
- Includes software and audio cable
- One-year warranty
- · Manufacturer varies 181745: 3600KB/sec. (slot type)

149307: 3600KB/sec. (tray)

162042: 6300KB/sec. (tray)

Part No.	Speed	Buffer	Wt. (lbs.)	1	10
181745	24X	128KB	2.3	\$49.95	\$39.95
149307	24X	256KB	2.6	49.95	39.95
162042	44X	128KB	2.5	59.95	49.95

JAMECO CD-ROM Cables



Connects your CD-ROM directly to your sound card making installation quick and easy!

- 2 x 28 AWG Weight: .02 lbs. 127546:
- · Compatible with most CD-ROMs
- · For use with Creative Labs, Sony or generic sound cards
- 3 connectors on each end of wire:
- 4-position (.100") housing connector;
- 4-position (.100") Molex type keyed connector;
- 3-position (.100") Molex type keyed connector

Part No.	Connection from Sound Blaster to	Length	1	10	50
136928	Panasonic	20"	\$2.95	\$2.49	\$1.95
127546	Sony/MPC2	25"	3.95	3.49	2.95
168612	Universal	18"	3.95	3.49	2.95

JAMECO CD-ROM Accessories





132265



181745

172179: Single CD case (w/ HP case)

76591: For caddymount CD-ROM drives

132265: Plastic case holds up to 3 CDs

148179 Carrying case

17101

129710

148179: Holds 24 CDs (in 148179 clear sleeves) · One-year warranty Part No. Description Wt. (lbs.) \$.39 172179 Single jewel case 0.3.....\$.49 \$.29 132265 3 CD jewel case 0.3.....1.65 1.45 gg 76591 Caddy 0.2.....5.95 5 35 4 49

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0.7.....**8.95**

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www.jameco.com



JAMECO ATX Motherboard for

Pentium® II 233-333MHz /

Celeron 266-366MHz

supports EDO and SDRAM upgradeable to 768MB

PS/2 keyboard and mouser, (2) USB type A female, (2) 9-pin male serial; (1) 25-pin female parallel

181761 Pentium® II motherboard...\$69.95 \$62.95

ATX Pentium® II 233-266MHz

Motherboard With Audio

On board I/O controller: (2) IDE ports; (1) floppy

ATX Motherboard for Pentium® MMX 90-233MHz

ALI M1541 Chipset

- · Award BIOS
- · Windows® plug and play compatible
- · Socket 7 type
- · Supports Intel Pentium® MMX
- 90-233MHz; Cyrix 686; AMD K-5/K-6
- Supports (3) 168-pin DIMM memory upgradeable to 768MB
- (4) PCI slots, (3) ISA slots; (1) AGP slot
- · On-board I/O controller: (2) IDE ports; (1) floppy drive port; (2) serial ports; (1) parallel port; (2) USB-A female ports
- · Async serial ports with high speed 16C550 and 16-byte FIFO, and parallel port supports EPP/ECP/Bi-directional mode
- PS/2 (keyboard and mouse); (2) USB-A female; (2) 9-pin male serial; & (1) 25-pin female parallel ports
- · 20-pin ATX type power connector
- Includes manual, 3.5" drivers, and cable
- Size: 12.0"L x 7.5"W Weight: 1.9 lbs.

Part No.	Description	1	10
173307	Pentium® MMX 90-233MHz\$79	.95	\$71.95

ATX Motherboard for Pentium® II **Processors**

82443LX Chipset

- · Single slot type 1 for Pentium® II processors up to 333MHz
- · Award BIOS
- (3) 168-pin DIMM
- sockets upgradeable to 384MB (SDRAM or EDO)
- (4) PCI and (3) ISA sockets with (1) shared PCI/ISA
- On-board: (2) IDE ports that supports (4) IDE devices; (1) floppy drive port; (1) AGP port
- PS/2 female keyboard and mouse: (2) USB-A type: (2) DE9 male serial; (1) DB25 female connectors
- · 20-pin ATX form factor
- · Includes manual, cable, retaining clip for Pentium® II processors; and CD-ROM drivers
- Size: 12.0"L x 7.4"W Weight: 2.5 lbs.

raitivo.	Description	10	
185367	Pentium® II motherboard\$79.95	\$71.95	

ATX Motherboard for

82443LX PCI Chipset

- · Single slot type 1 socket for Pentium® II processors
- 200MHz to 333MHz processors

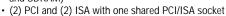
- (3) 168-pin DIMM sockets upgradeable to 384MB (SDRAM type) or 768MB (EDO type)
- · On-board: (2) IDE ports that supports (4) IDE devices; (1) floppy drive port; (1) AGP port
- female; (2) DE9 male serial; (1) DB25 female parallel; IrDA 5-pin header connectors on board
- retaining clips, and CD-ROM drivers

Part No.	Description	1	10
185383	Pentium® II motherboard\$7	9.95	\$71.95

ATX Motherboard Pentium® II and Celeron 233MHz-333MHz **Processors**

82443EX Chipset

- Single slot type 1 for Pentium® II and Celeron processors
- · Award BIOS
- (2) 168-pin DIMM socket upgradeable to 256MB (EDO and SDRAM)



- On-board: (2) IDE ports that supports (4) IDE devices; (1) floppy disk port; (1) AGP port; sound card with ESS chipset
- PS/2 female keyboard and mouse; (2) USB-A female; (2) DE9 male serial ports; (1) DB25 female parallel port; (1) DB15-pin female game port; (3) audio I/O jacks
- 20-pin ATX form factor
- · Includes manual, cables, retaining clip for Pentium® II processors, and C-DROM driver
- Size: 9.6"L x 7.8"W Weight: 1.9 lbs.

Part No.	Description 1	10
185359	Pentium® II motherboard\$69.95	\$62.95

JAMECO ATX Motherboard for Dual Pentium® II 233-300MHz and Pentium® Pro 150-200MHz

Intel 440FX Series Chipset

- · AMI BIOS Dual Socket 1 type
- · Windows® Plug and Play compatible
- · Support Pentium® II 233-300MHz; Pentium® PRO 150-200MHz (requires adapter) processors
- (8) 72-pin SIMMS upgradeable to 1GB of memory
- (5) PCI and (3) ISA slots with (1) shared PCI/ISA slot 20-pin ATX power connector
- On board I/O controller: (2) EIDE ports; (1) floppy port; (2) USB ports, (1) infrared port
- PS/2 female keyboard and mouse; (2) 9-pin male serial; (1) 25-pin female parallel connectors
- Includes manual, cables, and retention mechanism
 Size: 12.0"L x 9.8"W
 Weight: 2.9 lbs.

180241 ATX Dual Pentium® II and Pentium® Pro motherboard

Pentium® II 200-333MHz

Intel i82440LX Chipset

Award BIOS

· Single slot type 1

(4) PCI, (2) ISA,

(1) AGP slot

sockets that

and 3.5" disk

 Award BIOS Windows® Plug and

processors

SIMM sockets

Play compatible

Single socket type 1 for

Pentium® II 233-266MHz

Part No. Description

Intel 82440FX PCI Chipset

for Pentium® II and

Celeron processors

(3) 168-pin DIMM

disk port, and (1) IrDA headers

(modular type) connectors on board

• Size: 12.0"L x 7.1"W • Weight: 2.3 lbs.

20-pin ATX form factor power connector

· Includes manual, cable, retention mechanism,

- · Supports Pentium® II
- · AMI BIOS
- (5) PCI and (2) ISA with one shared PCI/ISA

- PS/2 female keyboard and mouse; (2) USB-A
- 20-pin ATX form factor
- Includes manual, cables, Pentium® II processor
- Size: 12.0"L x 7.3"W Weight: 3.1 lbs.

Part No.	Description 1	10
185383	Pentium® II motherboard\$79.95	\$71.95



upgradeable to 384MB (BEDO/EDO/ Fast page mode DRAM) (5) PCI slots and (3) ISA slots with (1) shared PCI/ISA slot

Supports (6) 72-pin

- On-board: (2) IDE ports that supports (4) IDE devices; (1) floppy drive port; (1) sound card with CRYSTAL CS4237B (3D audio chip) chipset
- PS/2 female keyboard and mouse; (2) USB-A female ports; (2) DE9 male serial ports; (1) DB25 female parallel port; (1) DA15 female game port; (3) audio I/O jacks
- 20-pin ATX form factor power connector
- Includes manual, CD-ROM drivers, cable, and retention mechanism for Pentium® II processors
- Size: 12.0"L x 9.6" Weight: 2.6 lbs.

Part No. Description 188082 Pentium® II motherboard...\$79.95 \$71.95

PICMG Embedded CPU Card for Intel Pentium® Processors

Industry wide compatiblity.

Microprocessor: Intel Pentium® 75/90/100/133/



166MHz (not included – pg 15) System memory: 8-128MB, 4 sockets for 72-pin SIMMs (not included – pg 17)

- Pipelined burst cache expandable to 512KB
- Two RS232 serial ports (16550) compatible includes FIFO)
- One multi-mode parallel port (SPP/EPP/ECP)
- Two PCI IDE ports and floppy drive interface
- 128KB award license BIOS Watchdog timer
- Built-in PC-104 expansion bus connector
- · Includes manual, cables, header and hardware • Size: 13.4"L x 4.9"W • Wt.: 2.1 lbs. • One-year warranty

Part No. Description

149286 Embedded motherboard......\$299.95



Price



ATX Motherboard for Pentium® II 233-266MHz

Intel 82440FX PCI Chipset

- · Award BIOS
- · Windows® plug and play compatible
- Single socket 1 type for Pentium® II 233-266MHz processors
- (6) 72-pin SIMM sockets upgradeable to 384MB (BĚDO/EDO/Fast Page DRAM)
- (5) PCI and (3) ISA with one shared PCI/ISA socket On-board: (2) IDE ports that supports (4) IDE devices; (1) floppy drive port
- Two high speed 16C550 UART compatible buffer fast serial port; and multi-mode parallel port that supports SPP/EPP/ECP mode
- PS/2 female keyboard and mouse; (2) USB-A female ports; (2) DE9 female serial ports; IrDA headers
- 20-pin ATX form factor power connector
- Includes manual, 3.5" drivers, cable, and retention mechanism for Pentium® II processors
- · Weight: 2.6 lbs. • Size: 12.0"L x 9.6"W

Description Part No. Pentium® II Motherboard...\$69.95 \$62.95

ATX Motherboard for Pentium® II Processors

FW82371 PCI Chipset and 82440LX AGP Chipset

- · Award BIOS
- Single slot type 1 socket for Pentium® II proces-sors up to 333MHz
- Supports (3) 168-pin DIMM sockets upgrade-able to 512MB (SDRAM) or 1GB (EDO DRAM)
- (4) PCI and (3) ISA with
- one shared PCI/ISA socket; (1) AGP slot
- On-board: (2) IDE ports that supports (4) IDE devices; (1) floppy drive port
 PS/2 female keyboard and mouse; (2) USB-A female;
- (2) DE9 female serial ports; (1) DB25 male parallel port 20-pin ATX form factor power connector
- · Includes manual, 3.5" drivers, cable, and retention mechanism for Pentium® II processor
- Size: 12.0"L x 7.5"W · Weight: 2.5 lbs. Part No. Description Pentium® II motherboard...\$89.95 \$80.95

Baby AT/ATX Motherboard for Pentium® II Processors (Up to 333MHz)

82443LX Chipset

- Single slot type 1 for Pentium® II processors up to 333MHz.
- Supports Pentium® II processors up to 333MHz
- Award BIOS
- (3) 168-pin DIMM
- sockets upgradeable up to 384MB (SDRAM) or 768MB (EDO RAM) • (4) PCI and (2) ISA with 1 shared PCI/ISA socket
- On-board: (2) IDE ports that supports (4) IDE devices; (1) floppy drive port; (1) AGP socket
 On-board male headers for (2) serial ports;
- (1) parallel port; (2) USB ports; (1) IrDA; (1) PS/2 mouse
- · AT 5-pin DIN connector for keyboard
- 20-pin ATX and 12-pin AT power connector
- Includes manual, cables, retaining clip for Pentium® II processor, and 3.5" disk driver
- Size: 9.9"L x 8.6"W · Weight: 2.5 lbs.

Part No. Description 10 Pentium® II motherboard...\$79.95 185375 \$71.95

AT/ATX Motherboard for Pentium® 90MHz-200MHZ

Intel 82439TX / 82371AB Chipset

- Socket 7 type
- Award BIÓS
- Supports Intel Pentium® 90MHz-233MHz; Pentium® MMX, Cyrix 686, and AMD K5
- (3) 168-pin DIMM sockèts upgradeable to
- 256MB (EDO and SDRAM type) (4) PCI and (3) ISA with one shared PCI/ISA socket
- On-board: (2) IDE ports that supports (4) IDE devices; (1) floppy disk port
- PS/2 female keyboard and mouse; (2) DE9 male serial ports; (1) DB25 female parallel port; male headers for USB ports
- 20-pin ATX and 12-pin AT form factor
- Includes manual and cable
- Size: 12.0"L x 7.4"W · Weight: 1.9 lbs.

Part No. Description Pentium® motherboard \$62.95 185341 \$69.95

AT Motherboard for Pentium® 75-200MHz

Intel 430VX PCI chipset

- · Award BIOS
- Windows® Plug and Play compatible
- Socket 7 type
- Supports Intel Pentium® 75-200MHz; Pentium® MMX 166-200MHz;
- Cyrix 686 P120 P166+; AMD K5 PR75 PR120
- (4) 72-pim SIMM socket upgradeable to 128MB
- (3) 32-bit PCI slots; (2) 16-bit ISA slots; (1) shared PCI/ISA slot
- On-board (2) IDE interface that supports (4) IDE devices and (1) floppy drive interface; (1) parallel port header; (2) serial port headers; (1) PS/2 mouse header; (1) USB port header
- AT type keyboard and 12-pin AT power connector
- Includes manual, cable, and 3.5" disk drivers
- · Weight: 3.1 lbs. • Size: 11.1"L x 8.6"W

Part No. Description Pentium® 75-200MHz M/B..**\$89.95**

""∰# PC Card Slot Fancard II

Increase air flow between cards

- CFM: 25
- · MTBF: 30,000 hours
- Can be installed into any ISA slot
- Circulates air within case to keep all components from overheating
- CE approved
- Part No. Description



PC Card Slot Air Exhaust Fan

Exhaust / Intake Air

- · Insert into card slot (non-electrical connection)
- The airduct can be extended and fan assembly reversed
- 12VDC 20 CFM airflow eliminates hot air out of case while increasing flow through case
- Fan: CE/TUV/UL/CSA approved
- · Weight: 0.4 lbs. One-year warranty

Part No. Description 10 124492 PC exhaust fan......\$14.95 \$13.49 \$11.95

3.5" and 5.25" Hard Drive Cooling Assemblies

Dual fans for even cooling

Keep your hard drive cool by using less space. These hard drive-cooling fans have 2 high airflow fans that provide 70% heat dissipation.

- · Dual 12V sleeve bearing fan
- Power consumption: 1.44W each
- RPM per fan: 3800
- · Combined airflow: 28 CFM
- · Easy installation
- · UL, CSA, CE approved fans
- · Includes mounting hardware
- Size: (175302) 5.7"L x 5.5"W x 1.2"H
- Size: (175311) 5.5"L x 4.0"W x 0.5"H
- · Weight: 0.4 lbs

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Part No.	Description	1	10	2!
175302	HD cooler (5.25")\$1	9.95	\$17.95	\$15.95
175311	HD cooler (3.5")1	9.95	17.95	15.95

3.5" Hard Drive Cooling Fan

Ball Bearing Fan for Reliability

- · Extends hard disk life and reliability
- Fits most 3.5" hard drives
- Ball bearing
- · Air flow: 20 CFM
- · Power output: 1.92 watts
- · Reduces hard disk temperature
- Operating voltage: 12VDC @ 160mA
- · Includes mounting hardware
- Size: 5.0"L x 4.0"W x 0.5"Thick
 Weight: 0.2 lbs.

Part No. Description 175521 HD cooling fan......\$14.95 \$13.49 \$11.95

JAMECO Back Panel Cooling Fan

Exhausts Hot Case Air

- Type: sleeve axial fan Back panel mountable
- · Airflow: 42 CFM
- · Noise ratio: 26 dBa
- Power: 1.8W
- Operating voltage: 12VDC @ 200mA
- One-year warranty
- · 10.5" wire with 4-pin Molex power connector
- Size: 4.3"L x 3.5"H x 1.1"Thick Weight: 0.3 lbs.

Part No. Description 152240 PC cooler fan\$19.95 \$17.95 \$15.95

JAMECO 3.5" Hard Drive Cooling Fan

- · Type: sleeve axial fan
- · 3.5" drive bay mountable (includes mounting screws)
- Power: 1.8 watts

10 UP

CEA

- · Airflow: 32 CFM, exhausts hot air from case through front panel vent
- · Noise ratio: 26 dBa
- Operating voltage: 12VDC @ 200mA
- 9.5" wires with 4-pin Molex type power connector
- Size: 4.9"L x 4.0"W x 1.0"H · Weight: 0.3 lbs. Part No. Description







InClose Hard Drive Cooling Fans and 3.5" Mounting Brackets

Now you can keep your hard drive cool and not consume valuable space! The "Bay Cooler" has two efficient fans



mounted on a 5.25" bay front panel which can be used in front of or in the drive bay above your hard drive.

- Two 12VDC @ 70mA fans · Easy access air filter • Beige vented face plate replaces bezel on a 5.25" bay
- Y adapter for any hard drive Weight: 0.3 lbs.
- Includes 3.5" mounting kit One-year warranty
- Part No. Description 1 10

135925 Hard drive cooler ... \$14.95 \$13.49 \$11.95



3.5" Hard Drive Bracket with 3 Cooling Fans

This cooler bracket fits a 5.25" bay in front of your computer case. This bracket also fits 3.5" hard drives and other internal 3.5" devices.



148742

- (3) 12VDC @ 90mA fans for cooling
- · CFM rating: 5.6/fan
- · Easy access air filter
- · Vented beige face plate replaces 5.25" bezel of 5.25" bay
- · Y adapter for hard drive and fan
- Includes mounting hardware Weight: 0.8 lbs.

Part No. Description 170595 Hard drive cooler ... \$24.95 \$22.49 \$19.95

PC 2-Ch Fans w/ Back Light

- Fits 5.25" bay
- · Operates on CR2032 3V battery (included)
- · Requires 12VDC for fans (5.25" drive connectors)
- Audible overheat alarm
 5.3 CFM (per fan) · Weight: 0.5 lbs. Controls two sensors
- Size (digital display): 1.86"W x 1.0"H
- Size: 6.0"W x 2.4"D x 1.7"H One-year warranty

Optional sensor: P/N 148769 for CPU monitoring Part No. Description 148742 2-ch super cooler.....\$39.95 \$35.95 \$32.49 148769 Sensor (flat type) CPU 4.95 4.49

JAMECO PC Internal Cooling Fan

Direct Air Flow to Internal Hot Spots

- 27 CFM
- · Noise: 27dBa
- Fan life: 25,000 hrs
- · Rated voltage: 12VDC @ 200mA
- · Input power: 1.44W max.
- · Operating voltage: 12VDC
- · Connector: 4-pin male/female (pass thru) molex type
- Size: 3.4"W x 1.3"D x 3.6"H Weight: 0.5 lbs.

Part No. Description 1 138966 Cooling fan.....\$12.45 \$11.95 \$9.95

ISA Fast SCSI-II Controller Card

- Compatible with DOS, Windows®, Windows® NT, Windows® 95, OS2 Netware, and SCO Unix
- · Internal and external SCSI-II connectors
- · Includes setting sheet, ribbon cable, and



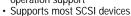
software (3.5" disk) • Size: 6.3"L x 2.9"W

 One-year warranty · Weight: 0.6 lbs.

Part No. Description ISA SCSI-II controller card \$44.95 \$39.95

JAMECO PCI Plug & Play SCSI-II Controller Card

- · Windows® 95 compatible
- Plug and play design
- Internal and external SCSI II 16-bit connectors
- Disconnect/reconnect, command tagged queing, scatter/gather, multi-threaded I/O operation support



- Supports Popular Operating System
- 133MB/S PCI-bus master transfer rate
- Includes manual, ribbon cable and software
- Size: 4.8"L x 3.0"W · Weight: 0.7 lbs.
- One-year warranty

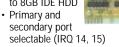
Part No. Description PNP PCI SCSI-II card.......\$89.95 \$79.95

JAMECO ISA Enhanced IDE Controller Card – LBA Support

Supports CD-ROMs and Low Level Format

- BIOS enhancement card to support LBA mode and low level format drivers
- Supports 2 IDE devices
- Support PIO mode 2 to 4, up to 8GB IDE HDD





- Supports FAST IDE and IDE CD-ROM (Atapi)
- Includes manual and cable
 Size: 6.2"L x 1.8"W · Weight: 0.6 lbs. One-year warranty

Part No. Description

IDE, LBA card (16-bit)\$19.95 \$17.95 161031

JAMECO ISA EIDE Super I/O **Controller Card**

· Supports: 4 EIDE devices (HD, CD-ROM, tape drive), 2 floppy drives, 2 parallel ports, SPP/EPP/ ECP,



- 2 serial ports, 16550 compatible, 1 game port
- Compatible with DOS 6.2, Windows® 3.1, Windows® Workgroups 3.11, OS/2 and Netware 3.1X, 4.01
- · Intelligent ROM BIOS automatically configures EIDE ports One-year warranty
- Includes manual and cables • Size: 6.5"L x 4.0"W · Weight: 1.1 lbs.

Part No. Description ISA-EIDE controller card.....\$59.95 \$54.95

JAMECO ISA Enhanced IDE Card

Supports 4 EIDE Devices (HD, CD-ROM, Tape Drive)

Provides multiword DMA transfer hardware (up to 8.33MB/sec.).

· ROM BIOS will auto-configure the hard drive parameters with any set-up feature



- Includes cables and manual
- · Weight: 0.7 lbs. · One-year warranty

Part No. Description 127386 Enhanced controller......\$54.95

JAMECO ISA IDE Controller Card

Supports 2 IDE devices including CD-ROM

 Jumper selectable IRQ 14 for primary and IRQ 15 for secondary ports



- Address selectable 1F0, 3F7 for primary and 170, 177 for secondary • One-year warranty
- Supports 2 IDE devices including CD-ROM
- · Includes IDE cable and instruction sheet
- Size: 6.2"L x 1.8"W Weight: 0.4 lbs.

Part No. Description 167222 ISA IDE controller card\$19.95 \$17.95

JAMECO PCI Ultra ATA/66 & Enhanced IDE HD / CD-ROM Controller Card

Supports 2 Ultra ATA/66 and/or 2 EIDE Devices

- · Compatible with DOS 5.0 and higher, Windows® 3.x/95/98/ NT3.x/NT4.x
- True Plug and play support
- Ultra 66 BIOS on board supports Ultra ATA66/ ATA33, EIDE, and ATA-2 devices
- · Includes 80 wire/ 40-pin cable (for Ultra ATA/66) and 3.5" drivers
- Size: 4.8"L x 2.1"W Weight: 0.3 lbs.

Part No. Description 167329 Enhanced IDE card\$44.95 \$37.95

JAMECO ISA IDE Super 16-Bit I/O Plus Cards

Supports 2 IDE and 2 floppy drives

- Parallel printer port (P/N 131318 is bi-directional)
- · Game port Two RS232
- serial ports



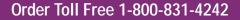
· UART emulation: 67061 - 16450; 131318 - 16550

· Includes manual and cables

· Weight: 0.9 lbs. · One-year warranty

Part No. Description 67061 16450 UART I/O card......\$14.95 \$13.49 131318 16550 UART I/O card.........29.95 26.95





JAMECO ISA RLL Hard **Disk Drive Controller**

Single 16C550 Port

- · XT compatible
- · Supports two hard disk drives; cables not included



• Size: 4.8"L x 1.8"W

· One-year warranty

Single serial card......\$39.95 \$35.95

JAMECO 32-Bit PCI I/O Card

(2) Serial 16C650 and (2) Parallel

ECP/EPP/SPP/BPP

· Serial port: SUN1889 chipset; 32 byte FIFO;

compatible with 16V450.550.650 chip; RS-232

IEEE standard interface; 921Kb/sec transfer rate

Parallel port: SUN1689 chipset, 32 byte FIFO;

ECP/EPP/SPP/BPP IEEE standard interface;

· Includes manual, cable, and CD-ROM drivers

• (2) DE9 male connectors and (2) DB25

• Size: 4.7"L x 3.6"W • Weight: 0.8 lbs.

ACC3203/ST78C36/HT6535 compatible chips;

· Weight: 0.6 lbs. Part No. Description

· System requirements:

higher compatibles;

· Plug and play ready

· Transfer rates up

to 921Kb/sec

· Weight: 0.4 lbs.

Part No. Description

· 32 byte FIFO

171361

System

requirements:

95/98/NT/2000;

available PCI slot

and higher

486/586/Pentium®

compatible; Windows®

· Plug and Play compliant

21.4Mb/sec transfer rate

Description

female connectors

Part No.

173260

· 32 bit PCI bus interface

· Supports IRQ sharing

486/586/Pentium® and

Windows® 95/98/NT/2000

112088 RLL 8-bit HD controller..... . **IAMECO** PCI Serial Card

and higher compatible; Windows®



ST78C36/HT6535 compatible chip; SPP/BPP IEEE standard interface: 21.4Mb/sec transfer rate

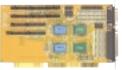
11, 12, 15), and address

• Size: 7.0"L x 3.6"W • Weight: 0.8 lbs.

Part No. Description

ECP/EPP/SPP/BPP High Speed Ports

486/586/Pentium and higher compatible; Windows® 95/98/2000/NT: available ISA slot



- · Parallel port: SUN1689 chipset; 32 byte FIFO; transfer rate
- Jumper selectable IRQ (3, 4, 5, 7, 9, 10, 11, 12, 15), address, parallel port mode, DRQ (1, 2, 3) and DACK (1, 2, 3)
- female connectors
- · Includes manual, cable, and CD-ROM drivers
- Size: 7.0"L x 3.6"W Weight: 1.1 lbs.

173286 ISA 4-port card\$39.95 \$35.95

PCI 4-port card \$69.95 JAMECO ISA Card

Quad High Speed Serial Port

 System requirements: 486/586/Pentium® and higher compatibles; Windows 95/98/NT/2000 compatible



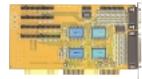
- RS-232 V.24 serial interface
 16 byte FIFO
- · Transfer rate of up to 460Kb/sec
- IRQ (3, 4, 5, 7, 9, 10, 11, 12, 15) and address jumper configurable SUN 1699 chipset
- Includes manual, 37-pin male to (4) DB25 male cable, and drivers on CD-ROM • Weight: 1.0 lb.
- Size: 6.7"L x 3.0"W · One-year warranty

Description 172398 ISA 4 port serial.....\$29.95 \$26.95

JAMECO ISA 16-bit I/O Card

(2) Serial 16C650 and (2) Parallel SPP/BPP

 System requirements: 486/586/Pentium



95/98/2000/NT; available ISA slot

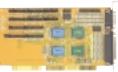
- Parallel port: SUN1689 chipset: 32 byte FIFO:
- Jumper configurable IRQ (3, 4, 5, 7, 9, 10,
- (2) DE9 male connectors and (2) DB25 female connectors
- · Includes manual, cable, and CD-ROM drivers

173278 ISA 4-port card\$29.95 \$26.95

JAMECO ISA I/O Card

(2) Serial 16C650 and (2) Parallel

· System requirements:



- Serial port: SUN1699 chipset; 32 byte FIFO; high-speed RS-232 V.24 serial interface; 921Kb/sec transfer rate
- ECP/EPP/SPP/BPP interface mode: 21.4Mb/sec
- (2) DE9 male connectors and (2) DB25

Part No. Description

, **J<u>AMECO</u>°ISA Input/Output Card** Dual 16450 Serial/Single Parallel Ports

- · IBM AT and higher compatibles
- · One parallel printer port
- Two RS232C serial ports

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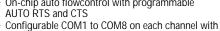
\$62.95

- One game port
- All ports can be disabled
- Primary: COM1 or COM3
- · Secondary: COM2 or COM4
- · Interrupt requests for primary and secondary serial ports: IRQ 3 or 4 • Weight: 0.4 lbs.
- Includes cables and manual · One-year warranty Part No. Description 105611 8-bit I/O card......\$19.95 \$17.95 \$15.95

JAMECO ISA Input/Output Card Dual 16550 Serial/Single Parallel Port

- IBM PC/XT/AT and compatibles
- 2 serial ports (9-pin male and
- 25-pin male) 16550 UART w/ 16 byte transmit/





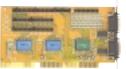
- IRQ 10, 11, 12, 14, 15
- Selectable four frequency for operation clock to support 115.2K to 921.6 Kbps
- 1 parallel port (25-pin female cable assembly)
- Supports one multi-mode parallel port w/ EPP/ECP
- ECP/EPP/BPP/SPP mode selectable
- Supports LPTI LPT6 with IRQ 3, 4, 5, 7, 9, 10. 11, 12, 14, 15
- · Supports DMA channel 1 and 3 for ECP mode
- Includes manual and 25-pin female panel bracket cable assembly Size: 5.2"L x 3.1"W
- · Weight: 0.6 lbs. One-year warranty

Part No.	Description	Price
161525	16-bit I/O card (16550 UART)	\$29.95

JAMECO ISA I/O Card

(2) Serial 16C650 and (1) Parallel ECP/EPP/SPP/BPP

· System requirements: 486/586/Pentium® and higher compatible: Windows® 95/98/ 2000/NT; available ISA slot



- Serial port: SUN1699 chipset 32 byte FIFO; RS-232 IEEE standard interface; 16C650/ 550/450 compatible chip; 921Kb/sec transfer rate
- Parallel port: SUN1689 chipset; ACC3203/ST78C36/ HT6535 compatible chip; ECP/EPP/SPP/BPP IEEE standard interface; 21.4Mb/sec transfer rate
- Jumper configurable IRQ (3, 4, 5, 7, 9, 10, 11, 12, 15), address, parallel mode, DRQ (1, 2, 3) and • (2) DE9 male connectors & (1) DB25 female connector
- · Includes manual, cable, and CD-ROM drivers
- Size: 6.1"L x 3.0"W · Weight: 0.7 lbs. Part No. Description

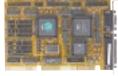
ISA 3-port card......\$34.95 \$31.49 173331

J<u>AMECO</u>°ISA Input/Output Card

4 Serial/3 Bi-directional Parallel Ports

16550 UART

- · 16 bit card
- · IBM AT and higher compatibles
- Can be used in an 8-bit system with IRQ 3, 4, 5, 7



- Four serial ports addressable to 3F8, 2F8, 3E8, 2E8 • Three parallel ports – addressable to 3BC, 378, 278
- All ports configurable to IRQ 3, 4, 5, 7, 9, 10, 11, 12, or 15
- Ports are jumper selectable and can be disabled
- · Parallel ports are bi-directional selectable UART chips emulate 16550 UARTs
- · Cables and panel brackets included for all ports
- Three DB25 female parallel connectors
- · Three DE9 male and one DB25 male serial connectors · Includes manual Weight: 1.0 lb. • One-year warranty

Part No. Description 117971 16-bit I/O card \$54.95 \$49.95 \$44.95



171555

171993

COM Address COM Address

3F8 2F8 3E8

JAMECO ISA Printer Card

Single Bi-directional Parallel Port

- · PC/XT/AT and higher compatibles
- · Single standard and bi-directional port
- · Jumper selectable for printer address and port (LPT1 - LPT3)
- · Jumper selectable for IRQ addressing (3, 4, 5, 7, 9)
- · One-year warranty
- Size: 4.0"L x 2.0"W
 Weight: 0.3 lbs.

Part No.	Product No.	1	10	25
155660	KW508G	\$19.95	\$17.95	\$14.95

JAMECO ISA Printer Card

Dual Bi-directional Parallel Ports

- IBM AT and higher compatibles
- Supports ECP/EPP/SPP
- · Select from IRQs: 3, 4, 5, 7, 9, 10, 11, 12, or 15
- · Address selectable to LPT1-LPT6
- · Print mode jumper selectable
- One-year warranty Weight: 0.6 lbs.

Part No.	Description 1	10	25
132214	2-port printer card .\$29.95	\$26.95	\$22.95

JAMECO ISA Serial Card

- · Quad 16C550 serial port UNIX
- · IBM AT and higher compatibles
- · (4) serial ports (RS232
- interface) for asynchronous communication • (4) DB25 male connectors 7.25"L
- Weight: 1.1 lbs One-year warranty

Part No.	Description	PHC
104678	4-port serial card	\$49.95

JAMECO ISA/IDE Disk Drive Adpater Controller Card

- · Interface two IDE hard drives to system
- · 16-bit IDE hard disk and floppy disk interface
- · Works with any combination 360KB, 720KB, 1.2MB and 1.44MB
- · Operates up to two floppy disk and two hard disk drives
- · Includes operating manual and cable
- One-year warranty

Part No. Descrip	lion	Price
10250 16-bit I	HD/FD adapter	\$19.95

Look for our cleaner more user friendly look



Limited Quantitites Available

Items marked in blue

New Products Introduced in Our Catalog Items marked in red

	Part	Product
	Number	Number
t	163635	DC2405F11
	174861	DCR2405F12
	174879	DCR2405F52

JAMECO ISA Serial Cards

Single/Dual 16C650 UART Port

- · System requirements: 486/586/Pentium® and higher compatibles; Windows 95/98/NT/2000
- Transfer rates up
- to 921KB/sec 16 byte FIFO
- IRQ (3, 5, 7, 9, 10, 11, 12, 15) and address jumper configurable
- Includes manual & drivers on CD-ROM Wt.: 0.5 lbs.

171504: Single High Speed Serial Port

· RS232 V24 standard serial interface • (1) DE9 male connector • Size: 5.0"L x 2.0"W

171555 Dual serial card......24.95

171555: (2) High Speed Serial Port

171504	Single serial card.	\$17.95	\$15.9
Part No.	Description	1	
• (2) DE9	male connectors	• Size: 5.0"L x 2.1	7"W

IAMECO° **ISA High Speed Serial Cards**

Single/Dual 16C650 Serial Port

- · System requirements: 486/586 or higher compatible, Windows® 95/98/NT
- · 32 byte FIFO
- IRQ (3, 5, 7, 9, 10, 11, 12, 15) and address jumper configurable
- · DE9 male connector
- Size: 5.0"L x 2.0"W Weight: 0.5 lbs.
- · Includes manual and drivers on CD-ROM

Part No.	Description 1	10
171993	Single serial card\$19.95	\$17.95
172380	Dual serial card29.95	26.95

IAMECO° ISA High-Speed Serial Card

Quad 16C550 Serial Ports

- IBM AT and higher compatibles
- Four serial ports; two each DE9M and DB25M
- High-speed 16C550 UARTs w/16 or 32byte FIFO
- IRQs: 3, 4, 5, 9,
- 10, 11, 12, or 15 · Includes cables
- and instruction sheet
- Weight: 0.7 lbs. One-year warranty

Part No. Description 132572 4-port hi-speed serial card...\$54.95

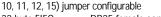
Addonics ISA "Extended" I/O Card

Quad 16550 Serial/Dual Bi-directional Parallel Ports

- · IBM AT and higher compatibles
- Win® 95 compatible Configurable using
- COM 1-8 and LPT 1-3 IRQs: 3, 4, 5, 7, 9, 10, 11,
- 12, 14, 15 for all serial and parallel ports
- UART chips emulate 16550
 16-byte FIFO buffer Includes manual, quick reference card and cables
- Weight: 1.7 lbs. Two-year warranty Description 130876 Extended I/O card\$119.95 \$107.95

JAMECO[®] ISA High Speed Parallel Cards

- 21.4MB/ sec Bi-Directional
- IBM PC/AT compatible with 16-bit ISA slot
- SupportsECP/EPP/ SPP/BPP standards
- Printer mode, address and IRQ (3, 4, 5, 7, 9,



- DB25 female connectors 32 byte FIFO
- · Supports DACK 1-3 and DRQ 1-3
- · Includes manual, cable and drivers on CD-ROM
- Size: 5.0"L x 2.2"W
- · Weight: 0.5 lbs.

Part No.	Description	1	10	25
171651	Single parallel card\$	19.95	\$17.95	\$15.95



· IBM PC/AT and AT compatibles

- 16-bit ISA interface
- MS-DOS, Windows® 3.x, 95 and NT compatible
- · Four 16C650 ultra high-speed serial ports
- · Supports COM 1-8 and IRQs 3-15 (jumper selectable)
- 32 byte FIFO Supports IRQ sharing
- · Includes cable and manual
- Size: 6.2"L x 4.3"W One-year warranty

Part No. P	TOUUCT NO.	Wt. (lbs.)		10
152291 4	042A	1.2	\$49.95	\$44.95

JAMECO[®] **PCI High Speed Serial Cards** 2/4/8 16C650 Serial Ports

- System requirements: 486 and higher compatible, Windows® 95/98/NT/2000
- · Plug and play compatible Standard RS232
- interface Transfer rate: up to
- 921KB/sec
- 32 byte FIFO · Supports IRQ sharing
- 172005: Dual 16C650 Serial Ports
- · (2) 9-pin male connectors
- Size: 4.7"L x 2.8"W · Weight: 0.5 lbs.

171547: Quad 16C650 Serial Ports

- · Includes manual, cable (37-pin male to (4) DB25 male) and drivers on CD-ROM
- Size: 4.7"L x 2.8"W · Weight: 0.9 lbs.

171660: (8) 16C650 Serial Ports

- · Includes manual, internal cable with bracket, 2 cables (37-pin male to (4) DB25-male) and drivers on CD-ROM
- Size: 6.5"L x 3.6"W · Weight: 1.8 lbs. Part No Description

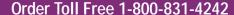
i dit ito.	Description	
172005	2-port PCI serial card \$59.95	\$53.95
171547	4-port PCI serial card119.95	107.95
171660	8-port PCI serial card179.95	161.95





10

171547

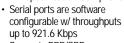


JAMECO Serial and Parallel I/O Cards and Brackets

JAMECO PCI Ultra High Speed I/O Cards

Serial (16C550) and Parallel

• 32-bit PCI bus with PCI bus 2.1 specification compliant



· Supports BPP/SPP mode compliant

 Windows® 95/98/NT 4.0 drivers supported



Part No.	Description	Wt. (lbs.)	1	10
146691	Single parallel	0.5\$44	.95	\$39.95
163707	Dual parallel	0.5 49	.95	44.95
146667	Dual serial (16C550)	0.1 49		46.95
169594	2 serial (16C550) 1 paral	lel 0.6 59	.95	53.95

JAMECO PCI Ultra Parallel Card

Single Ultra High Speed Port

- · System requirements: 486/586/Pentium® and higher compatibles; Windows® 95/98/NT/2000

169594

- · Supports ECP and EPP
- 32 byte FIFO Transfers data up to 21.4MB/sec
- Supports IRQ sharing Plug and play ready
- (1) DB25 female connector 32-bit PCI interface
- Includes manual and drivers on CD-ROM
- Size: 4.7"L x 2.2"W
- · Weight: 0.5 lbs.

Part No.	Description	1	10
171926	PCI single parallel card\$3	9.95	\$35.95

JAMECO°

PCI High Speed Combo Card (2) 16C650 Serial / (1) ECP/EPP Parallel Port

- System requirements: 486/586/ Pentium® and higher compati-bles; Windows® 95/98/NT/2000
- 16C650 UART compatible
- (2) ultra high speed RS232 ports and (1) high speed ECP/EPP parallel port



- 32 byte FIFO buffer Supports IRQ sharing • 32 bit PCI interface Plug and play ready
- (2) DE9 male & (1) DB25 female connector w/ bracket Includes manual, cable and drivers on CD-ROM
- Size: 4.7"L x 2.9"W · Weight: 0.6 lbs.

Part No. Description 172013 2 serial/1 parallel card.......\$69.95 \$62.95

Panel Bracket Cable Assemblies

 Standard computer back panel brackets • Length: 12" · Ribbon cable with header connector · Weight: 0.12 lbs.

149614/180179: Serial port (2) **149622**: Parallel port (1)

179995: Serial port (2) and parallel (1) Part No. Description **149614** DE9M to 10-pin header

DB25M to 10-pin header..\$4.95 \$4.49 \$2.95 180179 DE9M to 10-pin header

DB25M to 10-pin header 4.95 4.49 2.95 **149622** DB25 to 26-pin header......**4.95** 4.49 2.95 **179995** DE9M to 10-pin header

DB25M to 10-pin header DB25F to 26-pin header......**5.95 4.95 3.95**

JAMECO VESA/IDE Super I/O Card

with On Board Super VGA Video Adapter Supports 2 IDE, 2 floppy drives

Dual 16450 Serial, Parallel and Game Ports

 For use only with AT and compatibles with VESA local bus (PALM VL-BUS)



- · Supports up to two IDE hard disk drives
- · Supports up to two floppy disk drives: 1.44 MB, 1.2 MB, 720KB and 360KB densities
- Game port and parallel port 16450 UART emulation
- · Dual serial communication ports: COM1, COM3 and COM2, COM4
- · 1MB video memory, expandable to 2MB using 8 pieces of P/N 42315 (pg 17)
- · Max. resolution 1024 x 768/64K colors with 2MB of video memory installed • Weight: 1.4 lbs.
- Includes cables, spec sheet and driver diskette

Part No.	Description 1	10	25
149577	Super I/O w/ video\$12.95	\$11.49	\$9.95

, **J<u>AMECO</u>° ISA** Year 2000 Compliant Card

This card will replace your motherboard's BIOS with its own Year 2000 compliant version, affording your system millennium protection.



- · For ISA systems (Intel i.86 based, or IBM PS/2 model 286), 386 and 486
- · On board precise RTC chip, over 10 years of data retention
- On board advanced CMOS utility supports CMOS backup and restore features
- Includes installation guide Size: 4.0"L x 2.8"W
- Weight: 0.4 lbs.
- · One year warranty

Part No. Description **155301** ISA 2000 compliant card ...\$24.95 \$22.49

JAMECO PCI 3-Port Firewire Card 400 Mbps (IEEE-1394)

- · Allows IEEE-1394 connections to standard PCI bus
- Easily connectsyour digital camcorder, TV, VCR, DVD to your computer

149614

149622

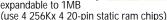
- · IEEE-1394 OHCI compliant
- · PCI Rev. 2.2 compliant
- · 100-400 Mbps transfer rates
- · Plug and play compatible devices can be added or removed without shutting down system
- 2.2V power consumption/ 5V input tolerant
- · Peer to peer communication structure
- Supports up to 63 devices Includes installation sheet
- · Size: 4.8"L x 3.5"W

Part No. Description

· Weight: 0.5 lbs. 169156 Firewire card......\$79.95 \$69.95 \$64.95

PROMISE VESA/IDE I/O Card

- · For use with AT compatibles with VESA local bus
- 512KB on board memory, expandable to 1MB





Supports two floppy drives (3.5" or 5.25" format up to 1.44MB)

Two serial ports (COM 1/3 or COM 2/4) and one parallel port

Serial port and parallel port are jumper configurable for IRQ and addressing

DB25 female connector for parallel and DE9 male for serial

· Includes cables, manual, and 3.5" drivers

• Size: 9.5"L x 3.2"W · Weight: 1.5 lbs.

Part No. Description VESA I/O card..... 180806 .\$29.95

Computer Cleaning Kits

- 3.5" head cleaning diskette, (1) bottle head cleaning fluid, CD-ROM drive laser lens cleaner, (1) bottle computer/ CD cleaning solution
- (20) anti-static wipes, (5) anti-static cleaning pads,(5) reusable swabs,
- (1) CD cleaning cloth Vacuum with accessories, tweezers and zipper case

Size: 11.5"L x 6.2"W x 1.9"H
 Weight: 1.2 lbs.

Part No. Description Multimedia cleaning kit\$19.95 \$17.95 134527

JAMECO Bi-directional Serial / Parallel Converter

115.2kbps, 512 Kb buffer · One DB25 female connector,

one Centronics 36-pin male connector DCE/DTE selectable

- Fully compatible
- with Windows® 95
- Baud rate: 300 bps 115200 bps
- · FCC class A certified, CE certified
- LED indicator for parallel busy status
 Wt.: 0.8 lbs.
 Includes adapter (9 VAC @200 mA)
- Stop bits: 1 or 2
- Size: 3.8"L x 2.4"W x 1.0"H One-year warranty

Description Part No. 10 \$59.95 \$53.95 \$48.95

IAMECO Computer Brackets



- · For securing cards into bus slots
- Fits standard PC/XT/AT cases Length: 4.75"
- Can be used to expand card I/O · Weight: 0.04 lbs.
- · See pg 65 for DB connectors
- Reduced 1.0" top end to first tab (center hole) 2.5" tab to tab (center hole)

Part No.	Description	Fig.	1 10	100
11754	Blank back panel	1\$1.49	\$1.29	\$.99
139424*	Blank w/ board mt.	21.49	1.25	.99
101717	For DE9 connector	3 1.2 !	.99	.75
101733	For DB25 connector	41.25	.99	.75
101741	For DC37 connector	5 1.2 !	.99	.75
101830	For DE9 & DB25 conn.	61.49	1.29	.99
101709	For DA15 & DB25 conn	7 1.2 !	. 99	.75

Pricing

JAMECO Computer Cases, Drive Enclosures & Removable Racks 169



AT & ATX Vertical Computer Enclosures with Power Supply

250/300 Watt

- · Slide-off side panel accesses roomy interior
- Includes power cord and $8\Omega/0.5W$ speaker 230V/115V switch
- · Assorted attachment screws · One-year warranty

138798: AT Mid Tower Case

140038/153066: ATX Mid Tower Cases

- · One internal 3.5" drive bay
- · Back panel supports seven expansion slots
- Three exposed 5.25" and two exposed 3.5" drive bays





138798

P/N 129761 shown

	•	,			
Part No.	Description	Agency Approval	Size (W" x D" x H")	Wt. (lbs.) 1	10
138798	Mid tower w/ 250W AT power supply	UL, CSA, CE	8.5 x 17.8 x 17.3	22.5 \$79.95	\$71.95
140038	Mid tower w/ 250W ATX power supply	UL, CSA, CE	8.6 x 17.8 x 17.3	32.1 89.95	80.95
153066	Mid tower w/ 300W ATX power supply	UL, CSA, CE	8.6 x 17.8 x 17.3	32.1 109.95	99.95
	<u>-</u>			•	



SCSI-I External Subsystem Enclosures For Multiple HDs, Network CD-Servers, RAIDs

- · Zinc plated metal body with streamlined plastic front panel
- Internal SCSI cables with ID address selectors
- Switching power supply UL/CSA/TUV approval
- · High quality internal SCSI cables
- · SCSI-II & SCSI-III versions can be special ordered
- · One-year warranty

129761: 5.25" Full Height or 2-Half Height Bays

Two SCSI-ID address selector
 RCA jack

129779: 5.25" 4-Half Height Bays





129779

129761

Part No.	Description	Power	Size (W" x D" x H")	Wt. (lbs.)	1	10
129761	SCSI-I full height or 2 half height bays	80W	7.1 x 11.3 x 6.5	8.3	\$89.95	\$80.95
129779	SCSI-I 2 full height or 4 half height bays	200W	7.0 x 14.1 x 10.3	15.0	119.95	107.95

JAMECO External CD-ROM Cases

- · SCSI-I or IDE interface
- · Streamlined appearance
- · Metal body with plastic front panel
- · RCA jack
- · SCSI-ID address selector on SCSI model (for P/N 126391)
- · 50 watt universal switching power supply
- Size: 6.5"W x 11.8"D x 2.0"H
- · Weight: 3.8 lbs.

129710: One-year warranty

126391: Use cable (P/N 73162, pg 182) for connections

Part No. Description 126391 SCSI CD-ROM external case ..\$49.95 \$44.95 **129710** IDE CD-ROM external case**79.95**

J<u>AMECO</u>° AT Mini-Vertical Case with 230 Watt Power Supply

- · Fits baby AT motherboards
- · Back panel with 7 expansion slots
- · Power and hard disk LED indicators
- · Power and reset switch
- Two exposed 3.5" and three (FC) exposed 5.25" drive bays **5.1**
- · 230 watt UL, CSA, FCC
- approved AT power supply · Includes internal speaker,
- hardware and detachable power cord
- · Color: gray
- Size: 7.0"W x 17.2"D x 15.4"H Weight: 14.7 lbs.

Part No. Prod. No. Description 172769 HTMH201MT AT mini-vertical case \$39.95 \$35.95

JAMECO SCSI Removable Rack

- · Removable storage module for SCSI I type 3.5" hard drives
- 50-pin female internal connector
- 50-pin male shrouded header external connector
- (2) 4-pin male headers for SCSI addressing and drive indicator Key lock for security
- 4-pin molex type power connector
- · Built-in fan (12VDC @ 50mA)
- · Includes mounting hardware
- Size: 5.8"W x 8.8"D x 1.6"H Weight: 2.4 lbs.

Part No.	Description	Price
134076	Removable rack	\$44.95

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www.jameco.com

Enclosures

For HD, DAT, MO, CD-ROM

- · Removable drive bracket for easy installation
- Multiple front panels to fit different types of storage devices



- Comes with necessary ID cables for all types of drives

· SCSI-ID address selector · One-year warranty **Compact Series** 129744

Perfect for

Barracuda

- · SCSI-I interface
- · Built-in 50 watt power supply (UL/CSA/TUV approved) and fan • Meets FCC requirements

P/N 129728 - 3.5" external case:

Size: 6.5"W x 9.8"D x 2.4"H

External CD-ROM Cases -See below left

Elegant Series

2 Built-in fans to cool off high speed drives

· New generation of SCSI enclosures with 50 watts universal (90~264V) power supply

P/N 129744 - 3.5" external case:

Size: 6.5"W x 9.7"D x 2.4"H

Part No.	Description	Wt. (lbs.)	1	10
129728	SCSI-I enclosure	3.5 \$7 9	9.95	\$69.95
129744	SCSI-Lenclosure (fai	n) 3.6 89	.95	79.95

IDE Removable 5.25" Rack Kit 🖶 for 3.5" Hard Drive w/ Fan

- · Supports DMA 66 hard drive
- Removable storage for 3.5" hard drives
- LED for power and hard drive activity
- · Retaining lock mechanism
- (1) 12VDC @ 50mA fan
- CFM rating: 5.6 Includes mounting hardware
- Size: 5.9"W x 8.7"D x 1.6"H Weight: 1.3 lbs.

Part No.	Description 1	10	25
170608	Rack kit (IDE)\$29.95	\$26.95	\$23.95

Hot-Swappable IDE 🚣 Removable Rack This rack is hot-

swappable through the keylock switch. Avoid down time while adding or removing drives! Lock and you power up; there is no power contact until you lock the rack.

 Air vents
 Power LEDs
 Keylock for security · Weight: 1.4 lbs. · One-year warranty

• Size: 8.8"L x 5.8"W x 1.7"H

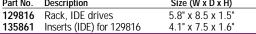
· SCSI-I racks can be special ordered

Part No. Description 134068 IDE hot swappable rack......\$49.95 \$44.95

JAMECO Removable HD Rack and Insert

- · Removable storage for 3.5" IDE
- Power LEDs
- Air-vents
 Keylock for security
 One-year warranty P/N 129816: • SCSI racks and inserts can be special ordered

P/N 135861: • Includes inner cable with IDE connector





art No.	Description	Size (W x D x H)	Weight (lbs.)	1	10	25
	Rack, IDE drives	5.8" x 8.5 x 1.5"	1.2			
33801	Inserts (IDE) for 129816	4.1" x 7.5 x 1.6"	0.8	19.95	17.95	13.95

170 Switching Devices

JAMECO ATX Mid-Tower Case

- · (3) Exposed 5.25" bays
- (2) Exposed 3.5" bays
- · (2) Concealed 3.5" bays
- · (7) Back panel slots
- · Power switch and reset switch on front panel
- · LED indicators for power, hard drive, and mode
- · Includes mounting hardware
- Size: 7.6"W x 17.0"D x 19.2"H
- · Weight: 24.7 lbs.

Part No. Description 181593 Mid-tower case.....

.\$39.95 \$35.95



JAMECO DB25 Surge Suppressor

Serial

Protects your sensitive line driver/receivers against damaging power surges.



DB25 (female to male)
 Weight: 0.1 lbs.

Part No.	Description	1	10	100
72371	RS232 serial surge sup.	\$3.95	\$3.49	\$2.49

JAMECO AC On/Off Timer

Deters theft! Turns lights on and off when you're not home!

- · One on/off setting
- · Input voltage: 125VAC/60Hz
- · 10A contact rating
- · Color: beige
- Size: 2.6"W x 1.9"D x 3.8"H
- · Weight: 0.4 lbs.

Part No.	Description	1	10	50
78553	Timer	\$2.95	\$2.49	\$2.25

Pocket Size Switch Box

Connects two computers to one printer. Compatible with both bidirectional and non-bidirectional printers.



- · Switchable setting for form feed and time-out
- · Two LEDs to indicate link status
- · Recommend P/N 100853 (pg 89) for power supply (9VDC @ 500mA with 2.1mm x 5.5mm center positive)
- Size: 3.3"L x 2.5"W x 0.9"H · Weight: 0.4 lbs.

Part No.	Product No. 1	10	25
172662	2 to 1 printer switch\$9.95	\$8.95	\$7.95

Now an easier way to get real time information

- Up to the Minute Pricing and **Inventory Information**
- Order Tracking
- Technical Support
- Product Information and **Photographs**
- New and Special Product Offers

www.jameco.com

JAMECO Pocket Sized Auto **Computer Printer Switcher**

Connect up to four computers to a printer. Operates on a first come, first-served basis.

- · Connectors: two inputs and one output
- · Interface: parallel DB25 female
- · Two LEDs indicate link status
- Size: 4.0"L x 3.2"W x 1.0"H Weight: 0.5 lbs.
- P/N 94641: One-year warranty

Part No.	Description	1	10	25
94641	2 to 1 printer switch\$	13.95	\$12.95	\$11.95

JAMECO Printer Buffer

- · Auto data compression
- · File copy function up to 255 copies
- · Cable distance: 10 meters (33')
- · Power up self-test function
- · Power consumption: 9VDC @ 100mA (max.)
- · Connectors: input connector 36-pin female Centronics; output connector - 36-pin male Centronics
- · Status indication LED: buffers status, copy begin/end, memory error · Memory size: 1MB
- Buffer speed: 45Kbytes/second compressed; 20Kbytes/sec uncompressed
- · Includes 9VDC@200mA center positive with 3.5mm male plug
- Size: 2.5"L x 2.0"W x 0.8"Thick Weight: 0.9 lbs.

Part No.	Description 1		10
180751	Printer buffer\$29.95	\$2	26.95

. IAMECO Printer Buffer and Switch Box

- · Can copy files or print files from PC to auxiliary devices
- Switch selectable for computer, auxiliary, and printer



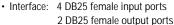
- · LCD display indicator for buffer/printer ready or error
- · (3) 36-pin Centronics female connectors
- · 256 bytes expandable to 512 bytes
- Size: 10.9"L x 9.5"W x 2.4"H
- · Weight: 3.7 lbs.

	FCO 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4	_		_
180398	Printer buffer/switcher	\$	19.9)5
Part No.	Description		Prid	CE

JAMECO 4-in-2-out Parallel Buffer

- · 256K byte memory
- Dynamic buffer allocation
- · Auto form feed/pause at file end (enable/diable)





- · Configuration saved to EEPROM
- · AC adapter and manual included
- Size: 10.5"L x 5.8"W x 1.3"H
- · Weight: 3.9 lbs. One-vear warranty

Part No.	Description	Price
76937	4-in-2-out parallel buffer	\$69.95

JAMECO DE9 Switch Boxes

DE9 Female

· Typical application: serial or TTL monitors

79126: 2-way switch box

- One-year warranty
- Size: 6.0"L x 4.8"W x 2.5"H
- · Weight: 1.2 lbs.

180081: 3-way switch box

- Size: 8.0"L x 6.1"W x 2.2"H
- · Weight: 2.1 lbs.

183417: 4-way switch box

Siza: 6.1"1 x 4.0"W x 2.2"H

SIZE. O.	I L X 4.U	٧V	Х	۷.
Weight:	1.3 lbs.			

vveigni	Weight. 1.5 ibs.		7
Part No.	Description	1	10
79126	2-way switch box	\$9.95	\$8.95
180081	3-way switch box	14.95	13.49
183417	4-way switch box	19.95	17.95

JAMECO 4-Way Switch Box

DE9 and 5-pin DIN Female

- · Typical application: keyboard and serial mouse
- Size: 6.0"L x 4.7"W x 2.5"H
- · Weight: 1.5 lbs.

Part No.	Description		
183409	4-way switch box		



114155

79126

180081

.\$19.95 \$17.95

JAMECO DA15 Switch Boxes

DA15HD/5-pin DIN Female

- · One-year warranty
- Size: 6.0"L x 4.0"W x 2.3"H
- · Weight: 1.3 lbs.
- 114155: 2-way switch box
- · For two computer systems requiring one keyboard and one monitor - díodes maintain keyboard in powered state

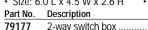
114163: 2-way switch box

114163 For single computer system requiring use of two keyboards and two monitors Part No. Description 2 computers\$14.95 \$13.49

114163 1 computer11.95 IAMECO DA15 Switch Box

HDD15/6-pin mini DIN Female

- Typical application: monitor/keyboard
- 2-way switch box
- · One-year warranty
- Size: 6.0"L x 4.5"W x 2.6"H





20095

155512

20124

\$7.95

2-way switch box\$14.95 \$13.49

IAMECO DB25 Switch Box

DB25 Female

- · Typical application: printer 20095: 2-way switch box
- One-year warranty
- Size: 6.0"L x 5.8"W x 2.3"H
- · Weight: 1.3 lbs. 155512: 2-way switch box

Size: 7.2"L x 4.9"W x 2.5"H

- · Weight: 2.3 lbs.
- 20124: 4-way switch box

20124

· One-year warranty







JAMECO DB25/Centronics Switch Box

(2) DB25, (1) 36-pin Centronics Female

- · Typical application: printer
- 2-way switch box
- · One-year warranty
- Size: 6.0"L x 5.3"W x 2.0"H
- · Weight: 1.4 lbs.

Part No.	Description	1	10
73322	2-way switch box	\$11.95	\$9.9

JAMECO Centronics Switch Boxes

20132

180128

180101

180187

36-pin Centronics Female

- Typical application: printer 20132: 2-way switch box
- One-year warranty
- Size: 6.0"L x 5.8"W x 2.3"H
- · Weight: 1.4 lbs.

180128: 2-way switch box

- · 2 to 1 (2 PCs to 1 printer) or 1 to 2 (1 PC to 2 printers)
- · Cross over
- (3) 36-pin Centronics female connectors
- Size: 7.3"L x 5.1"W x 2.3"H
- · Weight: 2.3 lbs.

20141: 3-way switch box

- All pins switched
- · Fullshielding meets FCC requirements
- · Gold plated all-female connector pins
- · Long-life operation
- Metal construction
- Size: 6.0"L x 5.8"W x 2.3"H
- · Weight: 2.7 lbs.

180101: 4-way switch box

- · 4 to 1 (4 printers to 1 PC) or 1 to 4 (1 printer to 4 PCs)
- (5) 36-pin Centronics female connectors
- Size: 7.4"L x 5.6"W x 2.4"H
- · Weight: 2.7 lbs.

180187: 5-way switch box

- 5 to 1 (5 PCs to 1 printer) or 1 to 5 (1 PC to 5 printers)
- (6) 36-pin Centronics female connectors
- Size: 10.0"L x 7.1"W x 2.9"H
- · Weight: 5.3 lbs.

Part No.	Description 1	10
20132	2-way switch box\$4.95	\$4.49
180128	2-way switch box (crossover)9.95	8.95
20141	3-way switch box 14.95	13.49
180101	4-way switch box9.95	8.95
180187	5-way switch box 19.95	17.95

Information at Your Fingertips

Log on to our web site for specials, technical tips and expanded product information



www.jameco.com

JAMECO RJ11 Switch Boxes

RJ11 6P6C Female

- · Typical application: fax, modem, or telephone switch
- · RJ11 6P6C female connectors



79142

79142: 2-way switch box

- · One-year warranty
- Size: 6.0"L x 4.8"W x 2.5"H
- · Weight: 1.2 lbs.

180161: 4-way switch box

• Size: 8.0"L x 6.0"W x 2.2"H

 Weight 	: 2.0 lbs.	180161	
Part No.	Description	1	10
79142	2-way RJ11 switch bo	эх \$9.95	\$8.95
180161	4-way RJ11 switch bo	ox 14.95	13.49

IAMECO RJ45 Switch Box

RJ45 8P8C Female

- · Typical applications: network switchers
- (5) RJ45 8P8C female connectors
- Size: 8.0"L x 6.1"W x 2.2"H
- · Weight: 2.0 lbs.

Part No.	Description	1	10
180099	4-way RJ45 switch box	\$9.95	\$8.95

JAMECO 2-Way & 4-Way Computer **System Sharing Switch Boxes**

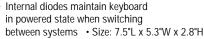
132249

134017

DA15HD/5-pin DIN/DE9M

- · Allows 2 or 4 users to share a system
- Each user may need a set of the following cables: P/N 66173, DA15HD M-M for monitor; P/N 114913, 5-pin DIN M-M for keyboard; P/N 132345, DE9 F-F for serial mouse (cables,





Part No.	Description	Weight (lbs.) 1	10
132249	2-way switch bo	x 1.6 \$17.95	\$15.95
134017	4-way switch bo	x 2.3 24.95	22.49

JAMECO Recommended **Switch Box Cables**

132345 39538

148515 40782 • For more cables see names 180 184

1 to Thore capies see pages 160-164				
Part No.	Description	1	10	
66173	6' DA15 male to male	.\$5.29	\$4.79	
132345	6' DE9 female to female	5.49	4.95	
39538	10' DB25 male to male	5.95	5.49	
40782	10' 36-pin centronics M to F	5.95	5.49	
148515	10' extension cable DE9			
	male to female	7.49	6.75	

ATEN Pocket Sized Auto **Computer Printer Switchers**

177421

185025

185033

185041

· Weight: 0.5 lbs.

- Non-powered
- · Compact size
- · Easy to install
- · Auto form feed selectable
- · Transparent to user
- · Built-in powerful ASIC
- Size: 5.9"L x 3.0"W x 0.8"H
- · Weight: 0.5 lbs.
- 177404 P/N 177421: bi-directional; 3.5" software included; (5) DB25 female connectors
- P/N 177412: (5) DB25 female connectors

• P/N 177404: (3) DB25 Temale connectors						
Part No.	Description	1	10	25		
177421	1 to 4 or 4 to 1\$14	4.95	\$13.49	\$11.95		
177412	4 to 112	2.95	11.49	9.95		
177404	2 to 19	9.95	8.95	7.95		

ATEN RS232 Auto Switch Boxes

For Serial Printers

- Non-powered
- · Cable distance: 15M (45 ft.)
- Auto and manual mode selectable
- · 0 to 90 secs. time out selectable
- DB25-pin male (DTE) connector and DB25-pin female (DCE) connector LED indicator for status

185025: 2-port switch box

- Size: 3.5"L x 3.0"W x 1.0"H
- · Weight: 0.4 lbs.

185033: 4-port switch box

- Size: 6.0"L x 3.0"W x 0.7"H 185041: 8-port switch box
- Size: 10.0"L x7.0"Wx3.0"H · Weight: 6.0 lbs. Part No. Product No. Description

185025	AS-251S	2-port\$9.95	\$8.95
185033	AS-451S	4-port 12.95	11.49
185041	AS-811S	8-port14.95	13.49

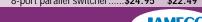
ATEN 4-in 2-out Parallel Switcher

- 4-in 2 out first-come first-serve auto switch
- Outputs operate simultaneously
- 100Kb/sed data throughput
- Supports flexible broadcast modes
- 5/10/25/60 seconds timeout and form feed selectable
- · Easy to use front panel button operation
- Input and output connector: DB25 female
- Includes user's manual, 3.5" disk; and 9VDC @ 600mA AC adapter
- Size: 10.7"L x 5.7"W x 1.5"H · Weight: 3.1 lbs. Part No. Description **183370** 4-in 2-out parallel switcher **\$14.95** \$13.49

ATEN 8-port Parallel Switcher

- · 8-port first come, first serve auto switch
- Auto or manual switch selectable on input port
- 5 to 60 second time out selectable
- · Auto form feed selectable · LED indicators for port selection, printer ready, and manual mode
- Input and output connectors: DB25 female
- Includes user's manual and 9VDC @ 300mA AC adapter • Size: 10.0"L x 7.1"W x 3.0"H • Weight: 6.1 lbs.

Part No. Description 8-port parallel switcher.....\$24.95 \$22.49





172 **ATEN** Sharing Devices

117701

European Version!

RS232 to RS485/422 **Bi-directional Converters**

- · Controlled by RTS signal
- · DCE and DTE selectable
- · Point to point and multidrop operations
- · RS485: terminal block and RJ11 connections
- · RS232: DB25 female connector
- · Data rate: 1MB/second
- · 4-wire full duplex or 2-wire half duplex
- · Cable length: 4000' maximum
- · Includes 9VDC, 300mA power adapter
- · Weight: 0.9 lbs. · One-year warranty

122956: features RS485SI optical isolation: 2000V

129218: features 220VAC input Part No. Description

10 117701 RS232 to 485/422 (110VAC)\$52.95 \$46.95 **122956** RS232 to 485/422 iso.(110VAC) **94.95** 129218 RS232 to 485/422 (220VAC)42.95

Reversible Auto Parallel Switcher

2 computers to 1 printer, or 1 computer to 2 printers

- · Supports IEEE 1284 nibble mode
- · Windows®/DOS compatible
- · DB25 connectors
- · Cable distance (max.): 20' (see page 149 for cables)
- Non-powered (9VDC @ 50mA power adapter optional)
- · Includes software and manuals
- · Manually switchable via software or switch
- · First-come, first-served transfer · Timeout: 10 sec.
- · One-year warranty
- Size: 4.0"L x 3.3"W · Weight: 0.4 lbs.

Part No. Description

127221 1st come, 1st serve transfer...\$29.95 \$26.95

4-to-1 Parallel Printer Sharer



- · Expandable to 1MB with RAM module (P/N 85569 – call for special order)
- Selectable automatic and manual modes
- Transparent to user Non-powered (passive)
- · Interfaces: 4 DB25 female input ports 1 DB25 female output port
- AC adapter not included recommend P/N 100853 (pg 89) • Size: 8.8"L x 6.3"W x 2.3"H
- Manual included · One-year warranty
- · Weight: 3.7 lbs.

Part No. Description

.\$19.95 \$16.95 76945 Parallel switch box...

SVGA 2-Channel Splitter

Duplicate a video signal from one source to 2 monitors up to 245 feet away.



- · Suitable for SVGA, VGA, and multisync monitors
- (1) HDDB15-pin male connector from PC to box; (2) HDDB15-pin female connectors from box to monitor
- Led power indicator
- Includes 9VDC@500mA power adapter, and manual
- Size: 6.6"L 3.3"W x 1.1"H Weight: 1.4 lbs.

Description 176866 2-channel monitor splitter ... \$49.95 \$44.95

110VAC Bi-Directional Non-**Buffered Serial/Parallel Converter**

- · US input voltage versions available
- Bi-directional conversion of parallel and serial signals
- Serial interface: hardware handshake RTS/CTS, software handshake XON/XOFF; DCE/DTE selectable; parity: odd, even, or no parity; data bits: 7, 8 Connectors: one DB25 female (serial)
- and one Centronics 36-pin male (parallel)
- Stop bits: 1 or 2 Baud rate: 300 to 38,400 bps Includes AC adapter (9VAC @ 200mA) and manual
- Size: 4.0"L x 2.5"W x 1.0"H Weight: 0.8 lbs.
- One-year warranty

Part No. Description 116935 Bi-converter.....\$49.95 \$44.95 \$39.95

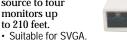
IEEE-488 to Centronics Converter Adapter

- · Allows printing from an IEEE-488 device to a parallel printer
- Uses a 9VDC, 300mA wall transformer (included)
- IEEE-488 24-pin female input connector
- Centronics 36-pin male output connector
- DIP switch configurable to 31 IEEE-488 addresses
- Size: 4.0"L x 2.5"W x 1.0"H
- Weight: 0.9 lbs. One-year warranty

Part No. Description 122964 IEEE to Centronics converter \$49.95 \$44.95

SVGA 4-Channel Splitter

Duplicate a video signal from one source to four monitors up



- VGA and multisync monitors
- DA15 female connectors on box
- Slide switch for video signal gain control Includes power adapter 9VDC @ 130mA
- Size: 8.8"L x 6.0"W x 1.9"H
- Daisy chainable
- · Weight: 3.6 lbs.
- One-year warranty

Part No. Description

10 4-channel monitor splitter...\$79.95 133866 \$69.95

Short Haul Modem

- · No external power required
- · DCE/DTE selectable
- Xon-Xoff or hardware
- handshaking
- RS232 interface (DB25 female)
- Up to 38400 baud One-year warranty
- · Will communicate over 6.3 miles (max.) of cable
- Size: 3.0"L x 2.0"W x 1.0"H Weight: 0.2 lbs.

Part No. Description 116581 Short haul modem \$29.95 \$26.95 \$23.95

Monitor/Mouse/Keyboard Cable

6' DBHD 15-pin male/female (monitor), 5-pin DIN male/female (keyboard), DE9-pin male/female (mouse) cable



32' DBHD 15-pin male/female (monitor), 5-pin DIN male/female (keyboard), DE9-pin male/female (mouse) cable

Part No.	Description	Wt. (lbs.)	1	10
141284	6' cable	1.6	\$22.95	\$19.95
141276	32' cable	4.8	49.95	44.95

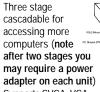
Two and Four PS/2 Computer **System Switch Boxes**

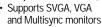
Allows one user to access two (P/N 149382) or four (P/N 149391) PS/2 computer systems

- · Selects any computer by hot keys and buttons
- Serial mouse and PS/2 mouse emulation and keyboard emulation for automatic PC boot up



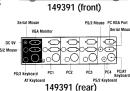
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183337

- · Includes manual and power supply (9VDC @ 600mA)
- Size (149382): 9.0"L x 6.0"W x 2.0"H (149391): 10.0" x 7.0"W x 3.0"H
- · One-year warranty

Part No.	Description	Wt. (lbs.)	1	5
149382	2 computer SB	4.0\$1	79.95	\$159.95
149391	4 computer SB	7.12	29.95	209.95

Printer Port Extenders

· Non-powered

- Compact
- 4-wire phone line data transfer
- · Maximum distance: 1300' (396 meters)
- Maximum data transfer specific Vh/s
- · Includes 25ft. RJ11 cable
- · Weight: 0.6 lbs.
- 183337:
- Transmitter and receiver DB25M & RJ11 (6P4C) jack • Size (transmitter and receiver): 3.0"L x 1.9"W x 0.9"H
- · Transmitter DB25M and RJ11 (6P4C) jack
- Receiver 36 pin Centronics male & RJ11 (6P6C) jack
- Size (transmitter): 3.1"L x 1.9"W x 0.9"H

 Size (receiver): 2.6"L x 2.1"W x 0.9"H Part No. Description Printer port (DB25M).....\$49.95 \$44.95 183337 Printer port (Cent. 36M)49.95 44.95

Printer Port Extender

- · Transmitter has DB25 male connector and RJ11 (6P4C) jack
- Receiver has 36-pin Centronics male and RJ11 (6P4C) iack
- 4-wire telephone line Non-powered
- 16KB/sec transfer rate Compact 2000' transmission distance (610 meters)
- · Includes 35ft. RJ11 cable · Weight: 0.7 lbs.
- Size: (transmitter) 3.0"L x 1.9"W x 0.9"H Size: (receiver) 2.6"L x 2.5"W x 0.8"H

Part No. Description 180911 Parallel port extender.......\$39.95 \$34.95



Modular Telephone/Network Connectors/Adapters and Accessories 173

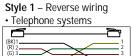
Surface Mount Wall Jacks & Plate

- · Weight: .01 lbs. Fig. 1 · Color: beige
 - P = Number of positions C = Number of contacts



Part No.	Description	W/E	Fig.	1	10	100
72311	6P6C & 8P8C double wall jack plate	_	1	\$1.95	\$1.75	\$1.29
103464	6P4C (SMT) adhesive jack RJ11	625A-4	2	1.39	1.19	.99
71984	6P6C (SMT) adhesive jack RJ11	625BS-6	2	1.39	1.19	.99
71651	8P8C (SMT) adhesive jack RJ45	635	2	1.59	1.35	1.19

JAMECO Couplers and Adapters







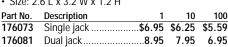
 vveign 	t: .02 lbs. coupler!	1			172814
Part No.	Description	Fig.	1	10	100
71757	6P6C modular coupler, Style 1	1	\$.85	\$.65	\$.49
135087	Style 2	1	.85	.65	.49
	8P8C modular coupler, Style 1	1	1.15	.99	.69
	8P8C modular coupler, Style 2	1	1.15	.99	.89
172814	8P8C modular coupler, Style 1 (for Category 5)	4	6.95	6.25	5.59
	8P8C modular coupler, Style 2 (for Category 5)	3	6.95	6.25	5.59
75248	6P4C female "T" adapter. Provides 2 jacks from 1 cable. Female jack (6P4C), 2 female modular receptacles (6P4C), Style 1	2	.75	.69	.59
72207	6P4C male "T" adapter. Provides 2 jacks from 1 line. Male modular plug (6P4C), 2 female modular receptacles (6P4C), Style 2	2	.89	.79	.69
181091	6P6C male "T" adapter. Provides 2 jacks from 1 line. Male modular plug (6P6C), 2 female modular receptacles (6P6C), Style 2	2	.99	.89	.79

JAMECO Surface Mount **RJ45 Jack Box**

Category 5, Unshielded

- · RJ45, unshielded
- 8P8C 100MHz
- · Weight: 0.2 lbs.





176073

JAMECO Modular Plugs

· Weight: .01 lbs. P = No. of positions C = No. of contacts W/E = Western Electric type number







180646

116610

124038

167290

102024

115844

103491		79273		79281		9343	
* Prepad	* Prepackaged: please order in increments of 10, 100 or 1000						
Part No.	Description	W/E	1	10	100	1000	
103491	4P4C (handset)	616	*	\$.11	\$.09	\$.07	
79290	6P4C (RJ11)	623	*	.12	.11	.08	
79273	6P6C (RJ11)	623	*	.16	.15	.11	
79281	8P8C (RJ45)	641	*	.21	.19	.15	
119343	8P8C (RJ45) unsh	nielded					
	(use w/ solid wire))	.43	.39	.29	.19	
116610 8P8C (RJ45) shielded		.99	.85	.69	.55		
116601 8P8C (RJ45) shielded							
	(use w/ solid wire))	.99	.85	.69	.55	

IAMECO Modular Jacks



180646 10P10C (for stranded wire) .99

PC mount

Fig. 1

H: 0.9" D: 0.7"

71757

Fig. 2

H. 0.8

181091

Fig. 3

H: 1.0"

D: 0.9"

Fig. 4

W: 1.0" H: 1.0"

D: 2.0"

176081

- · Voltage rating: 150 volts AC max.
- · Contact curr.rating: 1.5 amp max. @ 25°C
- · Durability: 750 mating cycles

151765: Side flange 105945/167290: Top flange

182924: Shielded

				102	27
Part No.	Description	W/E	1	10	100
115128	4P4C (handset)	_	\$.69	\$.49	\$.35
151765	6P4C (RJ11) .82"L x .61"W x .59"H	AMP	.52	.45	.35
105945	6P4C (RJ11) .48"L x .48"W x .71"H	623	.59	.49	.39
115836	6P6C (RJ11) side flange	_	.65	.59	.45
124038	6P6C (RJ11) 6" leads	-	.95	.75	.55
115844	8P8C (RJ45) .50"L x .59"W x .56"H	641	.65	.59	.49
167290	8P8C (RJ45) .65"L x .63"W x .72"H	-	.49	.39	.25
182924	8P8C (RJ45) .84"L x .63"W x .54"H	_	.95	.75	.55

RS232 Modular Jack Adapters



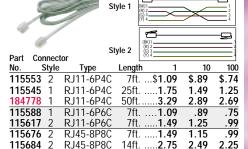
Change your RS232 port to an RJ11 or RJ45 modular jack. This will allow you to use modular phone cable rather than RS232 cable, thus simplifying networking applications. Comes

comple	ete with	n all necessary wiring	g and	hardv	vare.
Part Number	Product Number	Description	1	10	100
66181	G9P6	DE9 M to RJ11(6P6C).	2.19	\$1.95	\$1.75
66190	G9P8	DE9 M to RJ45(8P8C)	.1.95	1.75	1.49
114737	G9S4	DE9 F to RJ11(6P4C)	.1.95	1.75	1.49
66202	G9S6	DE9 F to RJ11(6P6C)	.2.19	1.95	1.75
66211	G9S8	DE9 F to RJ45(8P8C)	.2.49	2.25	1.95
66229	G25P6	DB25 M to RJ11(6P6C)	.2.19	1.95	1.75
66237	G25P8	DB25 M to RJ45(8P8C)	.2.49	2.25	1.95
114729	G25S4	DB25 F to RJ11(6P4C)	.1.25	1.15	.99
66245	G25S6	DB25 F to RJ11(6P6C)	.1.95	1.75	1.49
66253	G25S8	DB25 F to RJ45(8P8C)	.2.49	2.25	1.95

Modular Telephone/Printer Sharing Cables (Gray)

- RJ11 6P4C for telephone or network, 4 wire
- RJ11 6P6C for telephone or printer sharing • RJ45 – 8P8C for telephone or modem-dialer use

Style 1 - Reverse wiring for telephone systems Style 2 – Straight wiring for networking/Printer Sharing



Modular Data Network Cables Category 5 (100MHz)



w/ Boot

115721

w/o Boot

124804

124741 124863 124687

• 4 pair • 24 AWG (7 x 43) stranded Style 2 wiring (see above) • 100MHz • UTP • 8P8C

- Color code for easy wire tracing Prevent "snags"
- · All cables have boots except gray · High-flexibility Achieve optimum system performance [†]No Boot
- Part No. Description Color 3ft. cable RJ45 Gray[†] \$2.95 \$2.49 \$1.95 115713 Gray[†]...4.29 7ft, cable RJ45 3.75 3.29 115721 7ft. cable RJ45 ..3.95 2.95 175273 3.49 Gray. 115730 15ft. cable RJ45 Gray[†] ...5.49 4.95 4.49 5.49 115748 25ft. cable RJ45 ...7.49 6.75 Gray[†] 181059 50ft. cable RJ45 Gray .9.95 7.95 3ft. cable RJ45 .2.95 2.25 1 95 124724 Red 7ft. cable RJ45 Red 3.49 124732 3.95 ...4.95 124741 15ft. cable RJ45 Red 4.49 3.95 25ft. cable RJ45 170165 Red.....6.95 124847 3ft. cable RJ45 Black...3.29 2.29 124855 7ft. cable RJ45 Black...4.29 3.59 2.95 124863 15ft. cable RJ45 Black...**5.25** 4.75 170173 25ft. cable RJ45 Black...6.95 6.25 4.95 124804 3ft. cable RJ45 Blue 3.29 2.79 2.19 124812 7ft. cable RJ45 Blue 4.49 3.95 3.19 124821 15ft. cable RJ45 Blue**4.95** 4.25 3.95 170190 25ft. cable RJ45 Blue 7.49 6.95 6.25 124687 3ft. cable RJ45 Yellow 3.49 2.95 2.49 124695 7ft. cable RJ45 Yellow 3.95 3.49 2.95 15ft, cable RJ45 Yellow 4.95 3.95 124708 4.49 25ft. cable RJ45 Yellow 6.95

Modular Data Network Cable Category 5 (350MHz)

- 4 pair UTP 350MHz
- 24AWG (7 x 32) stranded 8P8C
- Style 2 wiring (straight through) see above
- With molded boot
 High flexibilty
 Color: gray
- Achieve optimum system performance

Part No.	Description	Wt. (lbs.) 1	10	100
168292	3ft. RJ45 cable	0.1 \$3.95	\$3.49	\$2.95
168305	7ft. RJ45 cable	0.2 4.95	4.49	3.95
168313	15ft. RJ45 cable	0.45.95	5.35	4.79
168321	25ft. RJ45 cable	0.6 7.95	6.95	6.25

JAMECO Modular Data Network Cat 5 (Crossover) Cable

- Connect 2 PCs w/o a hub
- 24AWG (7 x 43) stranded Style 1 wiring (see left above) • 8P8C
- Strain relief RJ45 connectors Part No.

Description \$5.59 169261 10' cable RJ45, gray..\$6.95





Fiber Optic Cable Assemblies







175337

• 6.25 / 125 micron fiber size

 Multimode · Color: orange

· Weight: 0.1 lbs.

Insertion Loss (dB) Table:

moortion 2005 (ub) Tubio.					
Part No.	A1	A2	B1	B2	
175337	0.11	0.05	0.11	0.07	
175345	0.13	0.11	0.07	0.04	
175353	0.21	0.10	0.23	0.07	
175361	0.08	0.08	0.12	0.12	
175370	0.15	0.04	0.11	0.02	
175388	0.09	0.10	0.16	0.05	

Part No.	Desc.	Length	1	10	100
175337	ST-ST	1M (3'3")	\$19.95	\$17.95	\$15.95
175345	ST-ST	2M (6'6")	22.95	19.95	17.95
175353	ST-SC	1M (3'3")	29.95	26.95	23.95
175361	ST-SC	2M (6'6")	32.95	29.95	26.95
175370	SC-SC	1M (3'3")	29.95	26.95	23.95
175388	SC-SC	2M (6'6")	32.95	29.95	26.95

BOMAR EZ RJ45

Use Standard Modular Crimping Tool

Easy to install. Strip the wire, insert the wire into the plug and pull out the wire on the other side of the plug. This ensures correct conductor

order and uniformity in crimping. No wire bar to deal with no wasted cable.

• 8P8C plug • For solid or stranded wire

Part No.	Product No. 1	10	100
158115	RJ45 (8P8C)\$1.75	\$1.49	\$1.25

AINES Modular Breakout **Adapters / Tester**

RJ45 / Telephone (Style 1)

This tool helps you determine whether the trouble is in the line or in the telephone. Unit has two RJ45 jacks on both ends, one is connected to the wall jack or equipment being tested by the K plug cable that is part of the unit and the other



Style 1

jack provides a continuous service while testing line conditions.

• Includes K type cable; reverse wired (style 1); 7" cable

• Size: (unit) 3.3"L x 1.4"W x 0.6"H • Weight: 0.2 lbs. Part No. Description

169164 RJ45 tester\$29.95 \$26.95

Token Ring to Cable Connector Kit Requires Assembly

- · Token ring to cable connector
- 10 pc. kit
- · Color: black
- · Material: plastic
- · Weight: 0.1 lbs.

Part No. 10 Description 100 183290 Token ring connector..\$9.95 \$8.95 \$7.95

JAMECO Token Ring **RJ45 Adapter**

- · Easy connection to UTP cabling
- Use type A or B style data connector with RJ45 jack

Determine cable length (flexibility)

Dimensions: 2.5"L x 1.0"W · Weight: 0.1 lbs.

Description 10 Token ring\$10.95 \$9.95 \$8.95

QUIKLINK Automatic Telephone

Ring Down Unit

Applications: elevator and door entry phones; in-office and off-premise emergency hotlines; tie lines between phones, PABX and Key systems; CO line simulators for sales demonstrations; testing rings, answering,



179936 and signal path functions in telecom

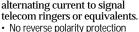
repairs, installation and production

- Ringing power: 70V @ 20Hz modified square wave
- Power input: 12VAC @ 700mA (maximum)
- · Line feed type: two wire unbalanced
- Maximum loop resistance: 600Ω
- · Termination: 4-40 screws
- · 179944: ringing cadence: 1 second on 1 second off
- 179936: LED hook status indicator; ringing cadence: continuous / 1 second on 1 second off / 2 seconds on 2 seconds off / 2 seconds on 4 seconds off; additional power input: 20 to 28VDC@300mA maximum; RJ11 terminations
- Size: 4.2"L x 2.5"W x 0.5"H · Weight: 0.4 lbs.

Part No.	Description 1	10
179944	E002 (economy model)\$79.95	\$69.95
179936	S002 (standard model)99.95	89.95

Black Magic Telephone Ringing Generator

Switching inverter that produces low-frequency alternating current to signal

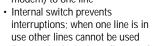


- Frequency: 20Hz
- Series resistor: 300Ω
- Nominal voltage: 86 · Weight: 0.06 lbs

Part No. Product No. 10 **145816** LBMR12**\$24.95** \$22.49

3-Way Telephone Line Adapter

Connect two or three devices (e.g. telephone, fax, modem) to one line



For standard telephone lines
 Cord length: 6' 7.5"

Size: 2.5"L x 1.8"W x 0.9"H · Weight: 0.3 lbs. 3-way telephone adapter \$14.95 \$13.49 144848

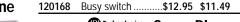
AMASTRA Phone Line Busy Indicator

Perfect for multiple users who share one dedicated phone line.

Compatible with all network

Strictly an indicator - will not interfere with emergency operation of phone line

Size: 2.3"L x 1.3"W x 0.8"H • Weight: 0.1 lbs Part No. Description 134261 Line indicator......\$12.95 \$11.49



Call display and call answer compatible

Size: 2.1"L x 1.1"W x 0.8"H • Weight: 0.1 lbs.

· Prevents accidental line interruptions when line is currently in use

RJ11 6P2C connector cable 2'L

One switch required for each

Description

extension phone on line

Busy switch\$12.95 \$11.49 \$9.95

AASTRA Busy Line Switch

Surge Plus Power/Modem Protector

Internet Users -Protect Your Modem!

- · Maximum rating: 15A/125AC
- (1) power outlet

Part No.

- (1) protected telephone RJ11 jack (6P4C)
- Lifetime warranty
- Size: 3.3"L x 2.2"W x 1.2"H Weight: 0.2 lbs

Part No. Product No. 100 160901 700-1M**\$6.95** \$6.25

9600 bps Fax/2400 bps Modem

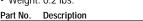
- 9600 bps fax/2400 bps modem
- Easy to use menudriven fax and data communications software Supports international
- CCITT and Bell standards
- Auto-install utility and external COM1 - COM4 select
- Software supported V.42bis compression and MNP-5
- FCC Class B and Part 68 certified
- · Weight: 1.2 lbs. Five-year warranty

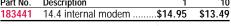
Part No.	Description	1	10
67598	Internal fax/modem	\$19.95	\$17.95

ISA 14.4 Internal Modem

Rockwell Chipset

- RC144ATF-P Rockwell chipset
- Windows® 95 compliant
- · Jumper selectable IRQ 2, 3, 4, 5, 7
- Size: 4.1"L x 2.7"W
- · Weight: 0.2 lbs.





ZOOM ISA 33.6Kbps Internal Fax/Modem

- High speed 16550 UART with 16-byte bi-directional buffer for faster data throughput
- AT command set compatible
- · True V.34 (ITU international standard) 28,800 bps technology
- Group 3 fax, class 1 and class 2
- · Supports V.34 ITU standard and V.Fast Class
- V.17 protocol for 14.400bps fax capability
- · V.42bis and MNP 5 data compression
- Ability to manually force MNP5, V.42bis, V.42 or MNP4 Auto negotiation of highest level of data
- compression and error correction Size: 4.6"L x 2.5"W • Weight: 0.2 lbs.
- Description Part No. 181796 Internal 33.6 fax/modem ...\$30.95 \$27.95



PHOEBE Modems

- PC/XT/AT and Pentium® compatibles
- Create voice and fax mail boxes with unique greetings
- Five fault locating tests Includes phone cable
- · Supports international CCITT and Bell standards
- Ultra reliable data transfer using V.42 bis/MNP5 error correction • FCC compliance • One-year warranty

ISA 56 Kbps Data/Fax **Internal Modem**



with Voice Mail and Speakerphone

- · Reprogrammable Flash ROM for upgrade to future 56K standards
- Fax supports V.17 V.29, V.27 ter, V.21 ch 2 Includes manuals, 70"
- phone cable communication software, and CD-ROM software driver for Windows® 95/NT 4.0
- · Hayes compatible
- 3.5" BitWare for Windows® disk
- Size: 7.1"L x 4.3"W Weight: 1.5 lbs.

Part No. Description 145023 ISA 56 Kbps int. modem.....\$59.95 \$53.95

External 56K Fax/Modem

- · 9-pin serial
- Data compatible to IUT-T V.34; V.32bis; V.32; V.22bis; V.22; V.21; Bell 212A and 103
- Fax compatible to ITU-T V.17; V.29; V.27ter; V.21
- Error checking compatible to V.42bis and MNP 2-4
- Data compression compatible to V.42 and MNP 5
- · Enhanced AT command set, Fax class 1 and 2
- · Data compatible to IUT-T V.90 and K56 Flex
- · Includes serial and phone cable, CD-ROM drivers and manual, and 12VAC @ 1A power supply
- Size: 5.9"L x 4.6"W x 1.3"H Weight: 2.3 lbs.

Part No. Description Serial modem (Rockwell) ...\$69.95 \$62.95 145031

JAMECO PCI 56Kbps Voice/Fax/Modem

- · Motorola 62412-51 chipset
- · Data ITU-T V.90 and 56Flex compatible
- ITU-T V.34: V.32bis: V.32; V.22bis; V.22
- · V.42bis and MNP-5 data compression compatible
- · Full duplex speaker phone
- V.42 and MNP2-4 error correction compatible
- V.80 (H.324 video conferencing interface compatible
- · Voice/audio mode V.17 (14400bps FAX)
- · Includes manual, cable and drivers on CD-ROM
- Size: 4.7"L x 2.8"W · Weight: 0.6 lbs.

Description 172881 PCI 56Kbps Modem......\$39.95 \$35.95

Information at Your Fingertips

Log on to our web site for specials, technical tips and expanded product information



PCI 56Kbps Internal Fax / Modem

· Minimum system requirements: 300MHz Pentium® or higher compatible: Windows® 95/98/2000: 32MB of RAM: 10MB hard disk space



- Data compatible to V.90; V.34; V.32bis; V.32; V.22bis; V.22; V.21 Bell 212A and 103
- · Data modem error correction compatible V.42; LAP-M, and MNP2-4 • No speakers
- · Data modem compression compatible V.42bis & MNP5
- Data fax compatible V.17; C.29; V.27ter; V.21; and group III fax class I
- · ACPI (advanced configuration and power interface), and APM (advanced power management) support
- · Includes phone cable, manual, and drivers in CD-ROM • Size: 4.8"L x 2.4"W • Weight: 0.5 lbs. Part No. Description

171918 PCI 56Kbps internal modem \$24.95 \$22.49

. IAMECO PCI Ethernet Cards 10Mbps and 10/100Mbps

· LED indicators

- for diagnostics
- · Supports Novell NetWare, Windows® NT, LAN, UNIX



- Manager, TCP/IP, Win® 95/3.1 FCC class approved
- Includes software driver (3.5" floppy)
- · Remote bootable socket • 32-bit PCI Bus Part No. Description Wt. (lbs.) 144928 UTP/BNC (10Mbps) 0.5.....\$19.95 \$17.95 153402 UTP (10/100Mbps) 0.3......**19.95 17.95**

JAMECO ISA Ethernet Cards

10Mbps

- · LED indicators for diagnostics
- Supports Novell NetWare, Windows® NT, LAN Manager, UNIX



TCP/IP, Win® 95/3.1 · FCC class approved Includes software driver (3.5" floppy)

Part No. Description 133022 UTP 0.4.....\$14.95 \$13.49 144936 UTP/BNC 0.5.....**19.95**

3COM PCI Ethernet Card

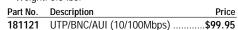
10Mbps and 10/100Mbps

· Supports Novell Netware, Windows® NT, LAN, Windows® 3.x / 95



· Remote bootable socket





PHOEBE PCI Ethernet Cards

10/100Mbps, Auto Detect

- · 32-bit PCI bus mastering for high throughput and low CPU command
- Complies with IEEE 802.3 ethernet standards
- · Full duplex and half duplex operation
- Auto negotiation functions
- · Plug and play installation
- · Auto set IRQs and I/O address
- · LED indicators for link and activity status
- Includes 3.5" drivers and users manual



173606

P/N 173606: UTP (10/100Mbps)

• Size: 4.8"L x 1.3"W • Weight: 0.4 lbs. P/N 173614: UTP (10/100Mbps) with WOL

(wake on lan) function

• Size: 4.7"L x 3.0"W • Weight: 0.7 lbs.

Part No.	Description	1	10
173606	UTP (10/100Mbps)	\$16.95	\$14.95
173614	UTP (10/100Mbps) w	vith WOL29.95	26.95

J<u>AMECO</u>® ISA 8 / 16 Bit Ethernet Cards





181041

10Mbps

- · Supports Novell Netware; LAN; Windows® for workgroups; FTP PC / TCP
- IRQ (2, 3, 4, 5, 10, 11, 12) and I/O address selectable
- Auto boot PROM socket · Weight: 0.8 lbs.

180988 / 181041 / 180945 / 180953: with LED indicators for diagnostics

Part No.	Description	Price
180945	UTP/AUI (8-bit)	
180988	UTP/AUI/BNC (16-bit)	14.95
180996	AUI/BNC (16-bit)	19.95
181041	UTP (16-bit)	9.95
	UTP/AUI (16-bit)	

JAMECO PCMCIA Type II **Combo BNC/UTP Ethernet Card** 10Mbps

- 10BaseT/10Base2 adapter
- Supports Novell Netware® 3.x/4.x, Microsoft® LAN Manager, Windows® for Workgroups 3.11, Windows® 3.1 and



Windows® NT 3.51, Windows® 95 and packet driver · Includes BNC/UTP connector, manual and

- driver software (3.5" diskette) · Weight: 0.8 lbs. · One-year warranty
- 132581





176 Networking Products

Intel ER8100 Router

- Maximum power consumption: 14 watts
- · LED indicators for status, LAN, ISDN, and channels
- · LAN Interface: 10Base-T or 100Base-T (RJ45)
- · ISDN interface supports BRI (Basic Rate Interface)
- · BRI or Basic Rate Interface provides two independent channels (B) channels which can run to separate destinations, and a signaling (D) channel
- · Includes manual, CD-ROM, and power supply (5.1VDC @ 2.6A table-top type)
- Size: 9.5"L x 9.5"W x 1.7"H

Part No.	Product No.	Price
180195	ER8100	\$449.95

Intel ER9200 Router

- Maximum power consumption: 25 watts
- LED indicators for system, WAN, and LAN
- · PC Card (PCMCIA slot)
- · LAN interface: 10Base-T (RJ45) and 10Base5 (AUI)
- WAN interface: X.21/V.11; V.24/V.28; V.35 or V.36
- · Routing protocols: IP, NOVELL IPX RIP/SAP
- · Forwarding ratios: 4,276 packets / second
- · Filtering speed: LAN up to 14, 800 packets / second
- Supports frame relay and X.25
- · Includes manual, RJ45 cable, CD-ROM (Device View 2.0 for Windows®)
- Size: 12.0"L x 9.2"W x 2.6"H Weight: 9.3 lbs.

Part No.	Product No.	Price
180208	ER9200	\$699.95

Intel ES550T Routing Switch

- · High speed connectivity
- Simultaneous two-way communication between connected devices
- Plug and play
- · Increased network throughput and performance
- (8) 10/100Mbps, non-blocking ports
- · Two optional slots for modules
- · Front panel LED shows switch, port, and traffic status
- · Ports supports half and full duplex operation
- · Port operates in a choice of switching modes: cut-through / fragment free / store and forward
- · Simultaneous full wire speed switching on all ports
- · Switch routing: IP and IPX protocols
- · Spanning tree support on all ports
- Includes manual, console cable, power cord, and CD-ROM
- Size: 17.4"L x 13.0"W x 3.3"H Weight: 19.9 lbs.

Part No.	Product No.	Price
180232	ES550T	\$1795.95

Intel EE220TX12 Stackable Hub

- · LED indicators for Collision / RPS / Bridged / Managed / Status / Power
- · LED indicators on RJ45 ports for link and activity
- 12 ports (auto-sensing 10/100Mbps per port)
- · Cascade connectors for stackable connections
- · Bridges 10Mbps and 100Mbps segments
- · Supports redundant power supply (RPS)
- · Two expansion slots for optional modules
- Stackable up to 8 HUBS
- Includes manual and power cable
- Size: 17.2"L x 13.0"W x 3.3"H Weight: 17.1 lbs. Product No.

Price 180291 EE220TX12.....\$899.95

JAMECO 3-Port Firewire Hub

IEEE1394 Compatible

- 3 IEEE1394 male port
- Compliant with IEEE 1394 - 1395 and compatible with 1394A
- · Perform function of 1394 cycle master
- Link up to 63 devices
- Support IEEE 1394 transfer rate of 100/200/400 Mbps
- · Provide software control of interrupt events
- · Power provider supports cable powered mode
- Supports Windows® 98/2000
- · Includes 5'8" cable
- · Plug and play
- Size: 3.8"L x 3.0"W x 1.2"H
- · Weight: 0.7 lbs.

153891

Part No.	Description	1	10	25
175732	3-port hub	\$99 95	\$89 95	\$79 95

JAMECO Ethernet Hubs

10Mbps

- · Includes user manual and power supply 153891: 5-port
- · Connectors: (5) RJ45 (TP); (1) uplink (TP cascade)
- Size: 5.4"L x 3.8"W x 1.1"H



- Connectors: (8) RJ45 (TP); (1) uplink (TP cascade); (1) BNC
- Size: 7.8"L x 4.0"W x 1.2"H

Part No.	Description	Wt. (lbs.)	1	10
153891	10BaseT 5-port	1.4	\$39.95	\$35.95
153904	10Base2/T 8-port	1.7	49.95	44.95

PHOEBE Ethernet HUBS 10/100Mbps, Dual Speed

- IEEE 802.3 10BaseT and 100BaseTX compliant
- · Auto sensing
- · Built-in uplink switching port



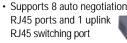
- · LED indicators for power and port activity
- · Supports auto negotiation RJ45 ports
- · Includes 12VDC@500mA AC adaptor, users manual, and mounting hardware
- Size: (P/N 173631) 7.4"L x 4.0"W x 1.2"H
- Size: (P/N 173622) 7.4"L x 4.0"W x 1.2"H

Part No.	Description	Weight	1	10
173631	5-port hub	1.8 lbs	\$99.95	\$89.95
173622	8-port hub	1.9 lbs	109.95	99.95

PHOEBE 8-port Ethernet HUB

10/100Mbps, Dual Speed

- IEEE 802.3 10BaseT and 10BaseTX
 - compliant



- IEEE 802.3x on full duplex Front
- mode; standard back pressure on half duplex mode · LED indicators for power, port activity, connection speed, full duplex or collision mode
- · Includes 12VDC@500mA AC adapter, user's manual, and mounting hardware
- Size: 7.6"L x 3.7"W x 1.0"H · Weight: 2.4 lbs. Description **183151** 8-port hub\$99.95 \$89.95

FOCUS NETWORK 5-Port Ethernet Hub with Auto Sensing Switch

10/100 Mbps

IEEE 802.3





Protocol: CSMA/CD

- Data transfer rate: (Ethernet) 10Mbps half duplex / 20Mbps full duplex
- Data transfer rate: (Fast Ethernet) 100Mbps (half duplex) / 200Mbps (full duplex)
- Uplink port shared with port 1 Topology: star
- LED indicators for power and link activity
- Includes manual and 7.5VDC@1A power supply

Size: 6.7"L x 3.8"W x 1.1"H · Weight: 2.7 lbs. Part No. Description

Price 185578 5-port hub \$89.95

FOCUS NETWORK 8-Port Ethernet Hub with Auto Sensing Switch

10/100 Mbps

- IEEE 802.3 10Base-T Ethernet
 - IEEE802.3u 100Base-TX fast Ethernet
- Data transfer rate: (Ethernet) 10Mbps half duplex / 20Mbps full duplex
- Data transfer rate: (Fast Ethernet) 100Mbps (half duplex) / 200Mbps (full duplex)
- 148,800 forwarding rate per port for 100Mbps
- Uplink port shared with port 1
- · LED indicators for power and link activity
- · Includes manual and 5VDC@2.4A power supply

• Size: 6.7"L x 3.8"W x 1.1"H Weight: 2.3 lbs.

Part No. Description **185586** 8-port hub

FOCUS NETWORK 24-Port Ethernet Hub with Auto Sensing Switch

- IEEE 802.3
- 10Base-T Ethernet IEEE802.3u 100Base-TX fast Ethernet
- Data transfer rate: (Ethernet) 10Mbps half duplex / 20Mbps full duplex
- Data transfer rate: (Fast Ethernet) 100Mbps (half duplex) / 200Mbps (full duplex)
- Protocol: CSMA/CD · Topology: star Uplink port push button selectable for normal or
- uplink port shared with port 24 · LED indicators for power and link activity
- · Includes manual and DE9 cable
- Size: 17.5"L x 8.0"W x 1.7"H Weight: 7.8 lbs.

Part No. Description 24-port hub\$569.95

JAMECO Ethernet 10Base5 to 10BaseT Transceiver

- For 10Mbps CSMA/CD LAN · FCC class A approved
- LED indicators for power, link, receive and collision
- Size: 2.7"L x 1.6"W x 0.8"H
- · Weight: 0.3 lbs. · One-year warranty

Part No. Product No. Description 10BaseT trans. ..\$29.95 \$26.95 130315 JE5001

JAMECO Token Ring RJ45 Adapter

- · Easy connection to UTP cabling
- · Use type A or B style data connector with RJ45 jack
- · Determine cable length (flexibility)
- Dimensions: 2.5"L x 1.0"W · Weight: 0.1 lbs. Description 125461

Token ring\$10.95 \$9.95 \$8.95 99.7% Stock



Industrial Computing Products and Data Acquisition 177

133276

133751

*min*miniminimi

19" Rack Mount ____ 17" **Enclosures**

Perfect for equipment setup in home, studio or laboratory.



· Front and back panels are steel w/ aluminum, pre-punched face plates

Top, bottom, sides durable 0.035" steel

Front panel: 0.12"Thick

· Black front panel All enclosures have

handles except P/N 132812

· Includes mounting screws

Part No.	Description	wt. (ids.)	1	10
132812	1U enclosure	6.2	\$34.95	\$29.95
132821	2U enclosure	7.9	41.95	37.95
132839	2U enclosure	9.1	46.95	41.95
132847	3U enclosure	10.6	51.95	46.95
132855	3U enclosure	11.8	64.95	57.95
132863	5U enclosure	15.4	84.95	74.95
	40111			

132812

132821

132839

132847

132855

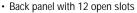
132863 8.56

🖄 19" Industrial Chassis with AT 300 Watt Power Supply

EIA RS-310C

· Use with 14-slot PC-BUS compatible backplane P/N 135061 (above right)

Meets EIA RS-310 C standards



• Supports one 3.5" and two 5.25" external accessible bays and two 3.5" internal bays

 Removable disk drive bay with shock resistant design • Front 12VDC cooling fan with removable air filter screen and mesh Waterproof front panel

Includes mounting hardware
 Color: gray

• Size: 16.8"L x 16.9"W x 7.0"H • Weight: 37 lbs.

Part No. Description 19" chassis w/ 300W PS. \$339.95 \$310.95

JAMECO 19" Rack Mount Monitor Enclosure for 14" Monitor

Clear Glass Front Panel

· Vented enclosure

· Hinged door for accessing monitor controls

· Includes rubber adhesive feet and mounting screws

· Color: gray · Weight: 30 lbs.

• Size: 19.0"W x 15.1"D x 14.0"H

Part No. Description 136021 Enclosure for 14" monitor .. \$269.95 \$244.95

IAMECO 19" Rack Mount Drawer with Keyboard and Trackball

Occupies a single unit (IU) rack space

· 5-pin DIN connector for keyboard and DE9

connector for trackball Includes wrist pads, module and software

· Color: gray

Size: 19"W x 13"D x 2.8"H

· Weight: 18 lbs. · One-year warranty

Part No. Description 150471 Rack mount KB drawer\$239.95 \$216.95

Relay Panels & Rack

19" Wide Panels:

• 10 gauge black aluminum

· One-year warranty Rack:

- · Black powder coat finish
- · 10-32 threaded holes

Dimensions (Ins.)

1.25

3.00

2.88 11.75

4.75 11 75

4.75

1.73

3.46

3.46

5.22

5.22

9.75

9.75

13.50

8.00 | 13.50

- Used with 19" wide panels
- · 16 gauge CRS base
- 1/8" aluminum side rails
- Size (at base): 19.8"W x 15.3"D x 84"H

One-year warranty

Part No.	Description	Wt. (lbs.)	1	10
133276	Rack panel/1.75"H	0.4 \$11	.95	\$10.75
133751	Relay rack/84"H	21.8 169	.95	149.95

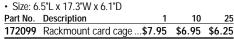
Rackmount Card Cage

· For 19" rackmounts

· 24 slots

· Weight: 6.3 lbs.

· Fits card size: 6.5"L x 5.5"W



Embedded CPU Card For Intel Pentium Processors

· Socket 7-type

 Support Intel[®] Pentium® and MMX 75Mhz to 233MHz, AMD



K5 and K6, Cyrix 686, and M2 CPU · Intel 82430TX2.1 and Winbond I/O chipset

· 128KB award license bios

• (4) 72-pin SIMM socket or (2) 168-Pin DIMM socket expandable up to 128MB of memory

· On-board 512Kb pipelined burst synchronous cache

 Reserved socket for DiskOnChip from M-system supports up to 72MB flash memory disk

· On-board: (2) IDE ports supports up to 4 IDE devices; floppy disk port supports up to 2 floppy drives; (2) serial ports, (1) parallel port, (2) 5-pin header USB ports, (2) PS/2 (keyboard and mouse)

· Includes manual, cables, and hardware

Size: 13.3"L x 4.9"W
 Weight: 2.1 lbs.

174351 Embedded motherboard...\$269.95 \$242.95

EXICIT. Water Resistant 101-Key Keyboard



· IBM AT, PS/2 compatibles

Membrane contact technology

5VDC @ 250mA

• Operating humidity: 10% to 95%rh

Operating temp.: 0 to 55°C Color: grav

Weight: 3.2 lbs. • One-year warranty

• Size: 15.5"L x 7.3"W x 1.8"H

Part No. Description **141866** Water resistant keyboard\$49.95

, **Jameco**º 16-bit ISA-pci-picmg Passive AT Backplane

Ten 16-bit ISA slots, four PCI slots and two PICMG (48-bit) slots

LEDs indicators for ±5V/±12V

· Compatible with P/N 146851 (left)

Size: 12.5"L x 10.0"W • Weight: 1.9 lbs.

Part No. Description 135061 ISA (10), PCI (4), PICMG BP \$99.95 \$89.95



Black Velcro Cable Tie

· Has buckle and mounting hole

· Weight: .03 lbs.

Part No. Product No. Lenath **149139** MD889BK 9".....**\$1.19 \$1.09**

. JAMECO Cabinet Mount Plate for 19" Cabinet

 Can be used for setting up industrial chassis casing for servers, PC's or patch panels

Made of industrial grade steel and aluminum

Size: 19.0"W x 15.8"D x 3.5"H

 Color: beige

Part No. Description 149500 Cabinet mount plate......\$34.95 \$31.95

CCI World I PC Multilab 19.2 Kb Serial Port Device 31 Digital I/O & 8 Analog Channels

Applications: education, engineering, robotics, remote monitoring, project development, diagnostics or virtually any application requiring 1/0 communications

Operates from any host with an RS-232 port capable of 19,200 baud Sink / source: 25mA

Analog: 8 analog channels with 0-5 volt input

I/O port configuration: port a - 6 digital I/O lines or 5 analog channels; port c - 6 digital I/O lines; port b & d - 8 digital I/O lines; port e - 3 digital I/O lines or 3 analog channels . Weight: 2.0 lbs.

Includes power supply, cables and 3.5" software
31 digital I/O lines
Size: 4.4"L x 3.2"W x 1.0"H

Part No. Description 164072 Multilab serial device\$139.95 \$125.95

RMY III Digital/Analog DAC Board 12-Bit Stepper Motor Controller

· High speed serial port interface up to 230, 400 bauds

4 channels with precision signal conditioning - 100mV, 2.5V and 5.0V input

24 digital I/O (TTL compatible), 11 analog channels with 12 bit resolution

 PWM, period measurement & steppermotor functions

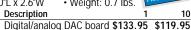
Free 32 bit DLL, OCX and Labview driver for rapid system development

One-year warranty

109911

Includes manual

 Size: 6.0"L x 2.6"W · Weight: 0.7 lbs. Part No.



Driver Schematic

Suggested Components for Above Circuit:					
Part No.	Qty	Designator	Description	Price	
29655	4	R1-R4	$1K\Omega$, 1/4W resistor (10 pc. min.)	\$.15	
30859	4	R5-R8	330Ω ,1/4W resistor (10 pc. min.)	.15	
25857	4	Q1-Q4	MJE 3055T transistor	.65	
76970	4	D1-D4	1N4003 diode (10 pc. min.)	.04	







178 Data Acquisition, DI/O and Comm Cards

ADVANTECH PCMCIA Serial Card

- 16C550 UART with 16-byte FIFO buffer
- · User selectable addresses and IRQ (including COM3 & COM4)
- Low power consumption
- · Two DE9 connectors
- 50~115.2 Kbps baud rate
- Two full featured RS232 ports
 One-year warranty
- Includes PC-ComLIB software Weight: 0.4 lbs.

Part No. Product No. Description

127440 COMPAD32 PCMCIA card . \$299.95 \$279.95

ADVANTECH ISA Relay Actuator and Isolated D/I Card

- 8 SPDT electromechanical relay actuator outputs, 120VAC @ .5A or 30VDC @ 1A
- · 8 opto-isolated digital inputs
- · LED indicators to show activated relays
- · Jumper selectable isolated/non-isolated input signals
- On-board relay driver circuits
 Includes manual • 37-pin female D-sub connector • One-year warranty

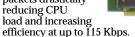
ISA Bus

- · Includes matching male connector, ready to wire · Weight: 1.0 lb.
- Easy to use and program Part No. Product No. Description

125655 PCL725 Relay & D/I card .. \$199.95 \$179.95

ADVANTECH ISA Dual-Port RS422/485 Card

This new upgraded card offers the 16C550 UART that buffers data into 16-byte packets drastically



- 2 or 4 wire operation in RS422/485 modes
- · Supports Tx, Rx, RTS and CTS signals • IRQ: 3, 4, 5, 6, 7, 9, 10, 11, 12 or 15
- · I/O addressing from 200H to 3F8H
- Selectable as COM 1-4 One-year warranty
- · Utilizes on-board optical isolators to eliminate ground loops for reliability in harsh environment
- Includes PC-ComLIB software Weight: 1.0 lb. Part No. Product No. Description

136434 PCL745B RS422/485 card \$199.95 \$179.95

ADVANTECH ISA PC-MultiLab Card

The Perfect Solution for Your PC-Based Engineering I/O Needs... PC-Lab Cards

For programmable voltage output and measurement, transducer interfacing, waveform recording, contact closure monitoring and relay control.

- 8 A/D inputs with 12-bit resolution
- 32 digital I/O, TTL compatible (16 in, 16 out)
- ±5V A/D input range 20-point wiring terminal
- daughterboard · 25KHz maximum A/D sampling rate
- One D/A output, double buffered
- Includes software utility CD-ROM w/ DOS drivers
- · Weight: 2.5 lbs. · One-year warranty

Part No. Product No. Description 28290 PCL711S PC-MultiLab card \$349.95 \$319.95

FXIOM, ISA 48-Bit Digital I/O Card

- IBM PC/XT and higher compatible
- 48 TTL/DTL compatible digital I/O lines arranged into 8-bit ports



- Software programmable for inputs/outputs
- Interrupt options: jumper-selectable to IRQ 2, 3, 4, 5, 6 or 7
- Buffer circuit provides high sinking current capacity
- Added pull-up resistor: CMOS/DRY CONTACT compatible • Power requirement: +5VDC @ 1.6A max.
- Emulates 8255 PPI mode 0 One-year warranty

Size: 10.2"L x 3.9"W · Weight: 1.2 lbs. Part No. Description **136784** 48-bit dig. I/O card\$104.95

EXICIT. ISA GPIB Interface Card

- · On-board firmware ROM callable for user's application program
- Complete Listener/Talker/ Controller (LTC) capability using the NEC µPD7210 GPIB TLC chip



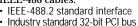
177121

- Data transfer rate over 300K bytes/sec.
- · Half-sized board fits any I/O slot or laptop PC
- 6 interrupt levels RF-shielded IEEE-488 receptable · Selection of 3 DMA channels using host DMA controller
- Size: 5.0"L x 4.2"W Wt.: 1.6 lbs. One-year warranty

Part No. Product No. Description 136696 AX5488 GPIB card\$199.95 \$179.95

ComputerBoards PCI GPIB 1MHz Cards

The PCI GPIB IEEE-488.2 interface converts any PCI bus personal computer into an instrumentation control and data acquisition system. Connect up to 14 instruments using standard IEEE-488 cables.



- 1024 word FIFO buffer
- Greater than 1MB/s transfer rates
- Plug and play no switches
- or jumpers Win® 95, Win® NT, Win® 3.1

and DOS compatible 177121: • Size: 5.3"L x 4.2"W • Weight: 1.3 lbs.

164427: • Size: 3.4"L x 2.2"W • Weight: 2.4 lbs. Description

Part No. PCI-GPIB card\$399.95 \$359.95 PCM-GPIB (PCMCIA bus)... 299.95

ComputerBoards PCM-COM232 Card

PCMCIA Bus

PC card/PCMCIA based serial port card.

- Low cost single port RS232 interface
- Uses 16550 UART
- 5, 6, 7 or 8 data bits
- Odd, even or no parity
- · 115 KBaud data rates
- · Configured as COM1, COM2, COM3 or COM4
- · PCMCIA type II compliant
- · Includes 1' cable
- Size: 2.9"L x 1.8"W · Weight: 0.2 lbs. Description

164451 PCM-COM232 card.....\$99.95 \$89.95

ComputerBoards ISA 24-Bit Digital I/O Board

- IBM PC/XT/AT/ PS/30 or compatibles
- Supports a broad range of software
- TTL level digital I/O: 24-bits as (3) 8-bit ports
- Input current: ±10μA
- · Logic low level: -0.5 to 0.8V (max.)
- · Logic high level: 2 to 5V (max.)
- Output low sink current: 2.5mA @ 0.45V
- · Output high source current: -2.5mA @ 2.4V
- · Power consumption +5V: 400mA
- Size: 4.5"L x 3.9"W Weight: 0.3 lbs.

Description Part No. 10 151511 CIO-DIO24 I/O card..... .\$69.95 \$62.95

ComputerBoards

IQ-TEMP Ambient Temperature Data Logger

The IQ-TEMP is a small, easy to use temperature data logger. Use the simple IQ Wizard software to set up your data logging application. Ideal





- · Battery: (1) 3.6V lithium AA, ten-year battery life under normal conditions • Memory: 21280 samples
- · Sample rates: 0.125 sec to 24 hrs
- Temp sensor: IC, -40 to 85°C range at ±0.5°C
- Size: 3.1"L x 2.5"W x 1.0"H
 Weight: 0.1 lbs.

Part No. Description IQ-Temp data logger\$99.95 \$89.95 168680



QuickPost PCI for **PCI-Bus Systems**

This is the first diagnostic card for monitoring Power-On-Self-Test results in systems using PCI-Bus architecture.



- Plugs into any PCI I/O slot
- · Digital indicators for every POST code error
- LEDs for monitoring power (DC): +12, -12, +5, +3
- · LEDs for clock and reset failure
- · Comprehensive manual w/ error codes from all major BIOS manufacturers including AMI, AWARD, PHOENIX and more
- · Weight: 0.7 lbs. · One-year warranty

Part No. Description 135108 PCI-POST diagnostic card \$199.95 \$179.95

Log on today! www.jameco.com



Apple® II and Macintosh® Accessories 179

• 110V/220V switchable

Adobe Photoshop 4.0 LE Bundle

Mac/Windows® Compatible

This limited edition software gives you the power to create compelling images and the precision to prepare them for whatever media you choose.



Bundle contains:

- (1) Adobe Photoshop 4.0 LE • (1) Jameco mouse pad – P/N 121363 (7.0"L x 5.5"W)
- (3) CD jewel cases May contain HP printer drivers

· Weight: 1.1 lbs.

Part No. Description 172611 Photoshop 4.0 LE bundle.....\$19.95 \$17.95

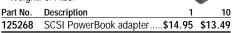
SCSI PowerBook Adapter

· Adapts a 25-pin D-subminiature to a PowerBook SCSI interface

· Color: black

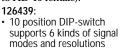
• Size: 2.3"L x 2.2"W x 0.9"H

· Weight: 0.1 lbs.



Mac to IBM Monitor Adapters/Cables

Allows use of Macintosh® computer with IBM monitor (DA-15 male to HD-15 female).



• Size: 2.0"L x 1.5"W

· Weight: 0.2 lbs.

One-year warranty

119538:

• For Power Macintosh® 6100 and 7100 computers • Size: 1.5"L x 1.6"W Weight: 0.1 lbs.

183345: DE15F - HD15M

• Size: 2.2"L x 1.6"W x 0.6"H · Weight: 0.1 lbs. **183353**: DE15M – HD15M

Size: 6'L

Part No. Description 10 126439 Mac to IBM adapter\$8.95 \$7.95 119538 PPC 6100/7100 to IBM adapter .. 5.95 4.95 183345 Mac to IBM (SVGA)5.95 4.95 7.95 183353 Adapter cable......8.95

Replacement Batteries

126754: Lithium half AA

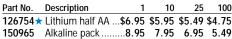
· Voltage: 3.6V (Tadiran)

Amps: .85Ah

· Diameter: .579" 150965: Alkaline pack

w/ connector (Ray-O-Vac) 126754

 Voltage: 4.5V Amps: 600mAh



QTRONIX_® 22-Key Mac[®] Keypad

 Fully compatible with Macintosh[®] power book computers and other computers

Numeric and function keys

- · Tactile click sound and touch feeling
- · Auto repeat function
- · Two key roll over
- 10 million cycles per switch

• Size: 6.2"L x 4.2"W x 1.3"H · Weight: 0.8 lbs. Part No. Description

176823 Scorpius 22ADB\$34.95 \$31.49

JAMECO 60 Watt Switching Power Supply for Apple® II, II+ and IIe

 60 watts · Fully regulated output

• +5V @ 5A, +12V @ 2.5A, -5V @ 0.5A, -12V @ 0.5A

Apple[®] type plug-in power cord included

· Can drive four floppy disk drives and up to eight • Fits inside the Apple II, II+ and IIe expansion cards

Short circuit and overload protection

- Same physical size as original power supplies
- Size: 9.5"L x 3.6"W x 2.2"H · Weight: 2.5 lbs.

· Data included One-year warranty

Part No.	Product No.	Description	1	10	25
22269	KHP4007	60W switching power supply	\$39.95	\$35.95	\$32.49

· 60 watts

· Fully regulated

+5VDC @ 6A,

+12VDC @ 2A

-5VDC @ 0.5A,

-12VDC @ 0.5A

Weight: 2.3 lbs.

1.44MB capacity

154608: Panasonic

Part No. Description

· Input voltage: 115VAC

• 5.5' three pronged removable power cord included

• Size: 11.3"L x 3.4"W x 2.2"H

· 4 mounting holes · Data included

· 6" output cable with 7-pin Molex connector

One-year warranty

85518 60W power supply .. \$44.95 \$39.95 \$35.95

Panasonic & SONY

Floppy Disk Drives

macally Single Button Mouse

275 CPI resolution

- Soft, quick responsive mechanical click button
- · ADB connector
- 29" cord Weight: 0.5 lbs.
- Size: 4.8"L x 2.4"W x 1.2"H

One-year warranty

126439

119538

· Weight: 0.7 lbs.

150965

Part No. Description 150480 Single button \$19.95 \$17.95 \$15.95

macally 105-Key Keyboard



- Enhanced 105-key layout
 ADB compatible
- Special soft key; positive response
- Size: 18.8"L x 7.8"W x 2.1"H Cable included
- · Weight: 3.6 lbs. · One-year warranty

Part No. Description 151669 Macintosh® keyboard...... ..\$44.95

Mac Cable for Hayes Compatible Modem

· Connect Mac & Performa Series to Hayes compatible modem · Length: 6'

• DB25M to mini DIN8M • Weight: 0.3 lbs. Part No. Description

\$3.95 169236 Modem cable.. \$4.95 \$4.49







Part No. Description Wt. (lbs.)

· Compatible with late \$39.95 model Quadras, all

Power PCs and G3s • Size: 5.7"L x 4.0"W x 1.0"H

154579: Sony

Compatible with Mac-II series, SE30 and early Quadras (700, 900, 950)

• Size: 5.8"L x 3.8"W x 1.0"H

154608 Manual insert 1.2..\$49.95 \$44.95 \$39.95 **154579** Auto insert 1.7....49.95 48.95 47.95

JAMECO 60 Watt Switching

Power Supply for Apple® IIGS

Apple Macintosh® Cable and Adapter Guide



130024





10604







177519

154608

SCSI Cables

Part No.	Description	1	10	50
73162	6' Centronics 50M-50M	\$7.95	\$6.95	\$5.95
	1.5' 50-pin SCSI socket ribbon cable	2 40	2.95	2 40
	TIDDUIT CADIE	3.49	2.93	2.49
	SCSI-I terminator	2.95	2.49	1.95

Network Cable Kit / Gender Changer

					9
Pa	rt No.	Description	1	10	50
73		8-pin mini DIN RJ11 PhoneNet kit	4.95	\$3.49	\$2.95
18	31235	8-pin mini DIN gender changer(F-F)	3.95	3.49	2.95

Printer Cables

Part No.	Description	1	10	50
177519	3' mini DIN8M	\$3.95	\$3.49	\$2.95
10604	6' mini DIN8M	4.95	4.49	3.95
130024	10' mini DIN8M	4.95	4.49	3.95
10591	6' DB25M to mini DIN8M	3.95	3.49	2.95

PowerBook SCSI Adapter

Part No.	Description	1	10
125268	DB25F to HDI-30M adapter	\$14.95	\$13.49



JAMECO DB25-Pin Ribbon **Cable Assembly**

· Metal connector

• 300V rating • 105°C rating

· 28 AWG flat cable

· Pin 1 cable indicator

· Tin plated contacts · Weight: 0.2 lbs.

Part No. Description 4' male to female\$3.95 \$3.49 \$2.95 12407

JAMECO Socket Connector to **Socket Connector Ribbon Cables**

Socket to socket connection

· 300V rating • 18" length

· 28 AWG gray flat cable

32715 Tin plated contacts · Weight: 0.1 lbs. Part No. Product No. Contacts 10 32686 S40-18-S\$2.95 \$2.49 \$1.95



50**2.95**

2.49

1.95

72805 32918

32918: Floppy Disk Drive Cable

• IBM PC/XT and higher compatible • Length: 23"

 Connects floppy drives to controller card
 Wt.: 0.2 lbs. 72805: IDE Hard Drive Cable

· Includes two socket 40-pin headers for two IDE devices . Length: 18" . Weight: .01 lbs.

18665: MFM/RLL Hard Drive Cable

· For PC/XT/AT and compatibles · Length: 2'

179987: Hard Drive Cable Kit

• (1) 20" IDE cable (P/N 72805) and (1) 25" floppy cable (P/N 32918)

Part No.	Description 1	10	100
32918	For use w/ 1-2 3.5"		
	and 5.25" drives\$3.95	\$2.95	\$2.49
72805	IDE cable3.95	3.49	2.95
18665	20-pin data cable2.95	2.49	1.95
179987	IDE/HD/FD cable kit 6.95	6.25	5.59

JAMECO® IDE Hard Drive Cable (ULTRA DMA 66)

Reduced Error Rate / Improved Speed

 For ULTRA DMA 66 type hard drives

• Includes (2) 40-pin sockets

· Length: 17"

· Weight .: 0.1 lbs.



JAMECO Internal Computer Cable Pack

· Standard computer back panel brackets

· Ribbon cable with header connector

· Bracket with DE9 male to 10 pin header and DB25 male to 10

pin header; bracket with DB25 female with 26 pin header; 20" long IDE cable for two hard drives; 20" floppy drive cable · Weight: 0.5 lbs.

180005 Internal cable pack....\$7.95 \$6.95

JAMECO RCA Cables





Video/audio applications

Color: black; P/N 29348: black w/ yellow shroud

139037: 1/8" male stereo plug to

• 184882: Low loss (2) RCA male (red & white)

 vveigni 	1: 0.1 lbs. • See page 64 lor	jacks	
Part No.	Description 1	10	100
183302	4' (2) male (red/black) \$2.95	\$2.49	\$1.95
139037	5' male to male "Y" 2.95	2.49	1.95
177527	6' (3) male to (3) male3.95	3.49	2.95
184882	6' (3) male to (3) male4.95	4.49	3.95
183311	4' male to male	.89	.79
106374	6' male to male1.25	.99	.69
29348	10' male to male1.59	1.39	1.19

JAMECO Ethernet Drop Cables

· DA15 connectors with metal hoods

 IEEE802.3 transceiver compliant **180734**: • Length: 2' Wt.: 0.6 lbs. 181340: • Length: 10' • Wt.: 1.4 lbs. 180734 Description \$8.95

2'\$9.95 2' DA15 M-F 180734 10'49.95 181340 10' DA15 M-F

JAMECO Switch Box **Adapter Cables**

177261: • 2' gray 6-pin mini DIN M-M non-coiled cable for 79177 switch box (pg 170) 114913: • 5' gray 5-pin DIN M-M coiled cable for 114163/114155 switch boxes (pg 170)

174772: • 6' black 6-pin mini DIN M-M 174908: • 6' gray 6-pin mini DIN M-M

112627: • 10' gray 6-pin mini DIN M-M non-coiled cable for 79177 switch box (pg 170)

Cable I	UI /71// SWILLI	i bux (pg i	170)		
Part No.	Description	Length	1	10	25
177261	6-pin mini DIN	2' (gray)	\$2.95	\$2.49	\$1.95
114913	5-pin DIN	5' (gray)	4.95	4.49	3.95
174772	6-pin mini DIN	6' (blk)	4.95	4.49	3.95
174908	6-pin mini DIN	6' (gray)	4.95	4.49	3.95
112627	6-pin mini DIN	10' (gray)	6.49	5.95	5.35

JAMECO RGB Video Cables

75Ω coaxial cable

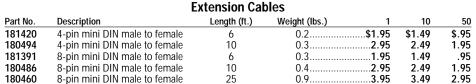
• Pin 1 red, pin 2 green, pin 3 blue, pin 14 (white/black) vertical, pin 13 (gray) horizontal

· Wt: 0.9 lbs. Description 10

5 BNC to DA15-pin male high density Part No. 73648 6' cable (black)\$20.95 \$18.95 \$16.95 22.95 19.95 44.95 118068 10' cable (black)24.95

JAMECO Apple Macintosh Printer / Adapters / Extension Cables





Printer Cable							
Part No.	Description	Length (ft.)	Weight (lbs.)	1	10	50	
181382	8-pin mini DIN male to DE9 female	6	0.3	\$3.95	\$3.49	\$2.95	
Adapter Cables							

Part No.	Description	Length (ft.)	Weight (lbs.)	1	10	50
180558	8-pin mini DIN male to DB25 male	3	0.2	\$2.95	\$2.49	\$1.95
181374	8-pin mini DIN male to DB25 male	6	0.3	3.95	3.49	2.95
180566	8-pin DIN male to DB25 male	1.5	0.2	2.95	2.49	1.95
180591	8-pin DIN rt. angle male to DB25 ma	ale 2	0.2	2.95	2.49	1.95

JAMECO® Serial Null Modem Cables



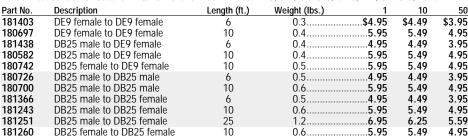
 Molded type connectors
 Color: gray • 181403 / 180697 Pin outs: 1–7 & 8; 2-3; 3-2; 4-6; 5-5; 6-4; 7 & 8-1

• 181438 Pin outs: 2-2; 3-3; 5 & 6-4; 7-5; 8-7; 20-6 & 8 (Serial Printer Null Modem)

• 180582 Pin outs: 2-2; 3-3; 4-5 & 6; 5-7; 6 & 8-20; 7-8; (Serial Printer Null Modem)

180742 Pin outs: 1-4 & 5; 2-2; 3-3; 4-6; 5-7; 6-20; 7-8; 8-8

180726/180700/181366/181243/181251/181260 Pin outs: 2-3; 3-2; 4 & 5-8; 6-20; 7-7; 8-4 & 5; 20-6



181260

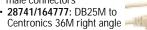
JAMECO Parallel Printer Cables

28716

28741

40782

- · IBM PC/XT and higher compatibles
- Molded and fully shielded DB25-pin male and 36-pin Centronics male connectors



• 180603: For Amiga 100C printer

• 180718: For API printer DB25M to 50-pin Centronics male connector

Part No.	Description	Wt. (lbs.)	1	10
180718	6' straight cable	0.6	\$3.95	\$3.49
28716	6' straight cable	0.4	4.29	3.59
28741	6' right angle cab	le 0.5	4.95	4.49
58536	8' straight cable	0.9	4.49	3.95
123781	10' straight cable	0.6	4.95	4.49
180603	10' straight cable	0.9	4.95	4.49
164777	10' right angle cab	le 0.7	4.95	4.49
28708	15' straight cable	0.8	6.95	5.49
101899	25' straight cable	1.1	8.95	7.95
184786	50' straight cable	2.1	12.95	11.49

JAMECO Centronics 36-Pin **Printer Extension Cables**

25/36 Conductor

· Molded and fully shielded Centronics 36-pin male and female connectors

· Lengthens standard printer cables or for use with switch box applications

· P/N 135028: metal hood, black

 P/N 18 	0574: metal housing	 Weight: 1.0 	lbs.
Part No.	Description No. of	Conductors 1	10
180531	6' M-M	25 \$2.49	\$2.25
135028	8' M-M metal, blk	36 2.95	2.75
40791	10' M-M	25 3.95	3.49
180574	10' M-M metal	25 3.95	3.49
183396	15' M-M	25 4.95	4.49
180515	6' M-F	25 2.49	2.25
180443	6' M-F	36 2.49	2.25
40782	10' M-F	36 5.95	5.49

IAMECO Serial Modem Cables

26008

 Molded and fully shielded DB25-pin male and female connectors

• 9 pins wired straight through:

pins i-	8 and 20 (metai snei	T MINES	100	
Part No.	Description	Wt. (lbs.)	1	10
53858	6' male to female	0.4	\$3.95	\$3.49
26008	10' male to male	0.5	4.95	4.49

JAMECO 9-Pin Serial Cables

AT and compatibles

· DE9-pin serial ports which need to be converted to DB25-pin serial

· Molded DE9 female to DB25 male connectors

Part No.	Description	Wt. (lbs.)	1	10	50
109583	1' serial	0.2	\$3.95	\$3.49	\$2.95
31721	6' serial	0.3	5.29	4.79	4.29
155521	10' serial	0.5	5.95	5.49	3.95

JAMECO 9-Pin Test Cables

· Weight: 0.2 lbs.

154798: DE9 male to DB25 male (2')

• Pin outs: 2-2, 3-3, 5-7, 7-5, 8-4

162915: DE9 male to DE9 female (6')

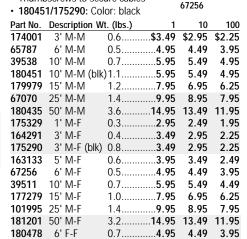
162915 • Pin outs: 1-3, 2-2, 4-5 Part No. Description 154798 DE9 male to DB25 male ..\$2.95 \$2.49 \$1.95 **162915** DE9 male to DB9 female....**3.95**



· Lengthens your standard serial cable or use for switch box applications

All lines connected straight through

Thumbscrews to secure cables



IAMECO° **Extension Cables**

0.9......5.95

1.6....**9.95**

5.49

8.95

28003

22234

4.49

7.95

DA15 connectors

181331 10' F-F

181323 25' F-F

· Molded connectors

· Straight through

· Thumbscrews

181286 · Color: gray · Weight: 0.5 lbs. Part No. Description 100 10 Length 6'.....\$4.95 \$4.49 \$3.95 181286 DA15 M-M DA15 M-F 6'.....**4.95** 4.49 181358 3.95

IAMECO PS/2 Keyboard **Adapter Cables**

28003:

· Connects AT type keyboards to the PS/2 5-pin female DIN to

6-pin male mini DIN

85500:

· Connects PS/2 keyboard to AT

• 6-pin female mini DIN to 5-pin male DIN connectors

Part No.	Length	Color	Wt. (lbs.)	1	10	25
28003	7.3"	Beige	0.6 \$3.9	5	\$3.49	\$2.95
85500	11.3"	Beige	0.8 4.9	5	4.49	3.95

JAMECO Keyboard **Extension Cables**

22234/114981/112045/169826:

 IBM PC/XT and higher compatibles

5-pin male DIN to 5-pin female DIN cable

28548/111053:

6-pin female mini DIN to 6-pin male mini DIN cable

• PS/2 computers • Color: beige

Part No.	Description \	Wt. (lbs.)	1	10
22234	PC/XT/AT 5' coiled	0.2\$3	.49	\$2.95
114981	PC/XT/AT 6' non-coiled	d 0.23	.95	3.49
112045	PC/XT/AT 10' non-coile	ed 0.34	.95	4.49
169826	PC/XT/AT 10' coiled	0.3 3	.95	3.75
28548	PS/2 6' non-coiled	0.24	.19	3.69
111053	PS/2 10' non-coiled	0.3 5 .	.49	4.95

JAMECO VGA Monitor **Extension Cables**

- · IBM PC/XT and higher compatibles
- · Extends VGA monitor cable; DA15 male to DA15 female

P/N 66165/148531 -134041 thumbscrews on each end 134041 - DA15 female with hex nuts



JAMECO VGA Monitor Cables

· IBM PC/XT and higher compatibles

· Connects video card to VGA monitor

DA15 male to DA15 male

Part No. Description Wt. (lbs.) 6' monitor cable 0.3..\$5.29 \$4.79 \$4.29 66173 148523 10' monitor cable 0.5 6.95 6.25 5.59

JAMECO Standard Monitor Cable

- · IBM PC/XT and higher compatibles
- · For monochrome, RGB EGA and multisync monitors
- · Connects video card to monitor
- · DE9 male to DE9 male

· Length: 6'

Wt. (lbs.) Part No. Description 6' standard 0.3.....\$3.95 \$3.49 \$2.95

AMECO Monitor Power **Adapter Cables**

· IBM PC/XT and higher compatibles

· Allows connection of monitors directly to standard IBM type power supplies

Monitor turns on/off

automatically via system power switch

· See page 71 for more power adapter cables

Part No. Description Wt. (lbs.) 177447 1' monitor cable 0.2..\$1.95 \$1.75 \$1.49 26382 6' monitor cable 0.4 3.95 **177455** 10' monitor cable 0.5 **4.95**

IAMECO DE9 Extension Cables



25700



132345: · DE9 female to DE9 female cable with thumbscrew 25700/148515:

· DE9 male to DE9 female cable with thumbscrew 181665:

· DE9 male to DE9 male cable

Wt. (lbs.) Part No. Description 10 25 132345 6' F-F 0.3.....**\$5.49 \$4.95** \$4.49 25700 6' M-F 0.3.....**5.15** 4.59 4.15 148515 10' M-F 0.4......7.49 6.75 5.75 181665 10' M-M 0.5.....**6.95** 6.25 5.49







66165







JAMECO Cables and Adapters

JAMECO IEEE-488 Cables

A variety of cable lengths are offered to ensure that the IEEE system requirements are met (20 meters maximum length with a maximum of 15 devices).



- · Color: gray
- · 24-pin IEEE-488 connectors

GPIB/GPIB

These cables are standard IEEE-488 cables having stackable GPIB connectors on both ends. Part No. Description Wt. (lbs.) 0.8.....\$28.95 \$25.95 \$23.49 73154 1 meter 1.2.....32.95 31.95 28.95 115781 2 meter 115801 4 meter 2.0.....36.95 33.95 28.95

JAMECO IEEE-1284 Compliant **Enhanced Parallel & Serial Cables**

The IEEE-1284 is the newest standard in high speed printing. Compatible with bi-directional communication data flow resulting in speeds up to 10 times faster than



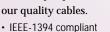
conventional applications.

- · Double shielded with 28 AWG stranded twisted pair inner conductors • Molded shells, PVC plastic
- Color: beige (P/N 130067/168233); black (P/N 161630); grey (P/N 172304) • Weight: 0.6 lbs.

Part No.	Description 1	10
130067	6' DB25 M to cent. parallel 36M \$9.95	\$7.95
172304	6' DB25 M to micro cent. 36M 6.95	6.25
168233	6' DB25 M-F parallel cable7.95	5.95
161630	10' DB25 M-M serial cable7.95	5.95

LAMECO IEEE-1394 Firewire Cables • For use with ATX

Connect the latest USB and Firewire peripherals with



- · UL approved
- · Molded connectors
- · Length: 6' · Weight: 0.3 lbs

	. 0.0 .20.			173047
Part No.	Description	1	10	25
175821	4-pin M – M	\$14.95	\$13.49	\$11.95
175839	6-pin M – 4-pin M	.14.95	13.49	11.95
175847	6-pin M – M	17.95	15.95	14.49

JAMECO PS/2 Keyboard Cable

- Coiled
- · Color: beige
- · Length: 5 ft.
- · Weight: 0.1 lbs.

Part No.	Description	1	10
128637	DB25 to 50-pin Centronics\$3	.95	\$3.49

JAMECO SCSI-II Terminator

- · Terminator for high density 50-pin connector
- Single-ended passive 50 position
- 150Ω resistance
- Size: 2.0"L x 1.6"W x 0.6"H

Part No.	Description 1	10
73461	SCSI-II terminator\$14.95	\$13.49

JAMECO 6" Power Supply **Extension Cable Set**

- Two 6", 6 conductor cables
- · Use with standard IBM compatible power supplies and motherboards



· Wiring: 18 AWG, 300V rating, UL/CSA approved

· Weight: 0.1 lbs.

Part No. Description Extension cable set......\$3.49 \$2.95 \$2.49 130809

. **IAMECO** 3.5" and 5.25" Disk **Drive Power Splitters**

- · IBM PC/XT and higher compatibles
- · Splits 4-line Molex male into 2 females
- Weight: 0.1 lbs

weigin	. 0.1 10	J.				
Part No.	Drive	AWG	Length	1	10	100
28353*	5.25"	18	5" each	\$2.75	\$2.49	\$1.95
72303	3 5"	22	5" each	2 /19	1 05	1 // 0

IAMECO 3.5" Disk Drive Power **Adapter Cable**

- · IBM PC/XT and higher compatibles
- · Allows connection of standard 3.5" disk drives to power supplies

Part No. Length AWG Wt. (lbs.) 0.02....\$2.49 \$2.25 \$1.75 22



- power supplies
- 20-pin ATX male and female connectors
- Color coded to ATX power supply code
- 15"L x 18AWG (wires) Weight: 0.3 lbs.
- Part No. Product No. 100 **170237** ATX-400-RV\$5.95 \$5.35 \$4.75







167370

144223



144231

· Weight: 0.2 lbs.

· See page 161 for SCSI type/connector guide

Part No. Description 133920 50-pin ribbon header SCSI-I to DB25 female back panel port......\$7.95 \$6.95 \$6.25 125241 50-pin ribbon header to HPDB50 SCSI-II female

JAMECO SCSI Adapters

back panel port......12.95 11.49 10.49 134674 DB25 male to Centronics

50 female SCSI-I9.95 8.95 6.95 145293 DB25 male to HPDB50 female SCSI-II14.95 13.49 11.95

167370 DB25 female to HPDB50

male SCSI-II12.95 11.49 9.95 144231 Centronics 50 male SCSI-I to

HPDB50 female SCSI-II...14.95 13.49 11.95 144223 HPDB50 male SCSI-II to

HPDB68 female SCSI-III..24.95 22.49 19.95

129971 Cent. 50 SCSI-I terminator...2.95 2.49 1.95

163424 Cent. 50 SCSI-I male to female pass thru terminator .. .99

181032 HDB68 female SCSI-III to HDB68 female SCSI-III

w/ bracket......29.95 26.95 23.95

IAMECO SCSI Cables











72848 • For PC/XT/AT and compatibles • All lines connected

† Also Macintosh® compatibles (See page 161 for SCSI type/connector guide)

Part No.	Description	10	50
72848	50-pin header socket ribbon cable † SCSI-I (24")	\$2.95	\$2.49
137550	68-pin header internal ribbon cable SCSI-III (27")	15.95	14.49
180507	Male 50-pin Centronics to male DB25 (SCSI-I) 5.5'	6.95	5.95
164769	Male 50-pin Centronics to male 50-pin Centronics † SCSI-I to SCSI-I (3')4.95	4.49	3.95
73162	Male 50-pin Centronics to male 50-pin Centronics † SCSI-I to SCSI-I (6') 7.95	6.95	5.95
118084	Male 50-pin Centronics to male HPDB50 cable SCSI-I to SCSI-II (6')19.95	17.95	15.95
118914	Male HPDB50 to male HPDB50 SCSI-II to SCSI-II (3')14.95	13.49	11.95
118076	Male HPDB50 to male HPDB50 SCSI-II to SCSI-II (6')17.95	15.95	14.49
149358	Male Cent. mini 68-pin to male Cent. mini 68-pin SCSI-III to SCSI-III (5')	7.95	6.95
137576	Male HPDB68-pin to male 50-pin Centronics SCSI-III to SCSI-I (3')19.95	17.95	15.95
137568	Male HPDB68-pin to male HPDB50-pin SCSI-III to SCSI-II (3')19.95	17.95	15.95
137226	Male HPDB68-pin to male HPDB68-pin SCSI-III to SCSI-III (3')19.95	17.95	15.95

JAMECO Tri-Port Serial Adapter

- Great for remote monitoring of RS232 signals
- Connectors: one DB25 female, one DB25 male and one DE9 male
- · Gold plated contacts · Wt.: 0.1 lbs.
- · Materials: connector shells are metal

Part No. Description Tri-port serial adapter...\$7.95 \$6.95 \$6.25 105195

JAMECO RS232 Interface **Check Tester**

Check tester identifies simple interface problems which you can repair yourself. Targets the status of lines 2, 3, 4, 5, 6, 8, 11, 19 and 20. Connectors: male to female DB25 • Wt: 0.1 lbs

Part No. Description 14285 Check tester \$7.95 \$6.95 \$6.25

JAMECO RS232 Mini Tester

Tests any RS232 (DB25) interface and helps to identify equipment that has failed. Seven bi-color LEDs indicate the status of TD, RD, RTS, CTS, DSR, CD and DTR. LEDs indicate positive (red) and negative (green). No extra power is required.

Connectors: male to female DB25. • Wt.: 0.1 lbs. Part No. Description 10

JAMECO RS232 Loopback Tester

Use for diagnostic testing of RS232 circuits. 4 LEDs monitor lines 2 to 3, 4 to 5, 6 to 20 and 15 to 17. The tester acts as a data verifier by sending data back to the transmission device. Connectors: male to female DB25. · Weight: 0.1 lbs.

26729

Part No. Description 10 22728 .\$6.95 Loopback tester..... \$6.25

IAMECO Miniature RS232 Breakout Box

Design new interfaces or modify old ones quickly and easily. Completely self-contained, these boxes include (25) 22 AWG wire jumpers and machine tool sockets. Connectors: male to female DB25. • Weight: 0.1 lbs.

Part No. Description 11181 Breakout box\$7.95 \$6.95 \$6.25

JAMECO Multilink RS232 **Tester and Breakout Box**

Visually indicates the status of lines 2, 3, 4, 5, 6, 8, 20 and 22 on the DTE and DCE

sides. Provides signal status at a glance. Complete cable

"breakout" and reconfiguration. Includes handy carrying case, 10 jumper wires and a device wiring chart. Connectors: (1) male DB25 and (1) female DB25.

· Cable length: 4"

• Size: 3.5"L x 3.3"W x 1.0"H • Weight: 0.3 lbs.

Part No. Description 25945 * Tester/breakout box...\$22.95 \$19.95 \$17.95

, JAMECO D-Sub 9-Pin to 25-Pin Serial Adapters

· Weight: 0.1 lbs. 10305: For use in AT or other computer systems that have 9-pin D-sub serial ports. 153576/10321/163740: For PC/XT systems with DB25 serial ports. 154683: 4-40 x .24" hex nut (4) 139985: Gold plated contacts, extra long thumbscrews



Part No.	Description	1	10	100
10305*	DE9 F to DB25 M	\$2.95	\$2.49	\$1.95
163740	DE9 M to DB25 F, thumbs	screws		
	on DE9 side only		1.75	1.49
153576	DE9 M to DB25 F, thumbs			
	on DB25 side only			1.75
10321*	DE9 M to DB25 F	4.29	3.59	2.95
154683	DE9 F to DB25 F (4/40 nuts	s) 3.49	2.95	1.49
139985	DE9 F to DB25 F (thumb)	3.49	3.15	2.95
	IAMECO Full llan	ماماء	Jei na a	

JAMECO Full Handshaking **Null Modem Adapters** Self-contained null-modem

(cross-over) adapters. Change any standard straight cable into a null cable quickly and easily. Weight: 0.1 lbs. Internal pin configuration: 26260/17224: 1-1, 2-3, 3-2, 26260 4-5, 5-4, 6-20, 20-6, 7-7, 8-20 **26243**: 1-1, 2-3, 3-2, 4-8, 8-4, 5-8, 8-5, 6-20, 20-6, 7-7 Part No. Description 26260 DB25 M to DB25 M.....\$3.49 \$2.95 \$2.49 DB25 M to DB25 F......3.95 26243 17224 DB25 F to DB25 F.......**3.95**

JAMECO PS/2 Port to AT **Compatible Serial Mouse Adapters**

PS/2 and compatibles. Allows you to use an AT compatible D-sub 9-pin serial mouse with a PS/2 computer. Male D-sub 9-pin to male mini DIN 6-pin connector.

Two retaining screws/nuts. · Color: beige

 Size: 1.6"L x 1.3"W · Weight: 0.1 lbs. 100335 Part No. Description 10 100 152901 Serial mouse adapter w/ threaded spacer.... .\$2.95 \$1.95 \$1.49 100335 Serial mouse adapter w/ thumbscrew 3.95 3.49 2.95 180523 Serial mouse cable .4.95 4.49 3.95 adapter (1 ft.).

IAMECO VGA Adapter

· Adapts 15-pin VGA to 9-pin output · Male DA15 to female DE9 adapter

· Weight: 0.1 lbs

Part No. VGA adapter.....\$3.95 \$3.49

. IAMECO Cable Adapters

37-pin Straight Through

· Molded 37-pin connectors

· Color: gray · Length: 6'

 Weight 	: 0.9 lbs.			18129
Part No.	Description	1	10	2
180611	DC37 M-M	\$5.95	\$5.49	\$4.9
181294	DC37 M-F	5.95	5.49	4.95

JAMECO Slim-Line Standard and **Monitor Gender Changers**

These revolutionary slim-line gender changers are only 0.69" wide, eliminating the space problems caused by standard gender changers. When plugged into your existing cable, they add only 0.44" to the cable.

All metal cases.

 Captive locking screw (male)

· Captive locking nut (female)





18446

18497

Grounding tangs (male)
 Weight: 0.04 lbs.

Part No.	Description	1	10	100
18497*	D-sub 9-pin male\$3.9	5	\$3.49	\$2.95
18489*	D-sub 9-pin female3.9	5	3.49	2.95
56071	D-sub 15-pin male3.9	5	3.49	2.95
56063	D-sub 15-pin female3.4	9	2.95	1.95
119319	D-sub 15-pin female HD 3.9	5	3.49	2.95
119301	D-sub 15-pin male HD3.9	5	3.49	2.95
18446	D-sub 25-pin male3.6	9	3.49	2.79
18420	D-sub 25-pin female3.9	5	3.49	2.95
170085	D-sub 25-pin M-F3.4	9	2.95	1.95
18471	D-sub 37-pin male4.4	9	3.95	3.49
18462	D-sub 37-pin female4.4	9	3.95	3.49
180662	Centronic 36-pin male3.9	5	3.49	2.95
180654	Centronic 36-pin female 3.4		2.95	2.25

JAMECO Standard D-Sub **Gender Changers**



Standard 9 and 25-pin D-sub male and female gender changers for interfacing two cables or connectors of the same gender

· Weight: 0.1 lbs.

152901

180611

Part No.	Description	1	10	100
16635	D-sub 9-pin male\$	1.95	\$1.75	\$1.49
16643	D-sub 9-pin female	1.95	1.75	1.49
181139	HDB15 female	1.95	1.75	1.49
22058	D-sub 25-pin male	1.95	1.75	1.49
22074	D-sub 25-pin female	1.75	1.55	1.25
180671	Centronics 36-pin male2	2.95	2.49	1.75
183361	Centronics 36-pin female 2	2.95	2.49	1.75

JAMECO Keyboard Adapters



159089: AT keyboard adapter

- · Connects PS/2 keyboard to AT
- · 6-pin female mini DIN to 5-pin male DIN 159097/157930: PS/2 keyboard adapter
- Connects AT type keyboards to the PS/2
- 5-pin female DIN to 6-pin male mini DIN (PS/2)

Part No. Length Housing Wt. (lbs.) 1 159089 1.6" Metal .02 \$2.95 \$2.49 \$1.95 159097 Metal .02...**2.95** 1.95 157930 1.7" Plastic/metal .04...2.95 1.95

JAMECO Ordering Information

5 EASY WAYS TO ORDER

Telephone: Toll-Free 24 hours a day!



1.800.831.4242 International orders,





Toll-Free 1-800-237-6948 International FAX 1-650-592-2503 Brazil Toll-Free 000-817-455-6119 Columbia Toll-Free 980-912-6784 Indonesia Toll-Free 1.803.015.237.6948 Mexico Toll-Free 001-800-593-1449 New Zealand Toll-Free 080:044:0470



sales@jameco.com http://www.jameco.com On-line catalog! Our complete offering of over 6,000 products searchable on the Jameco website!



Fill out the order form (page 185) and mail it to us. Your order will receive our prompt attention.



1355 Shoreway Rd., Belmont, CA Will-call office hours are 8:00 a.m. - 5:00 p.m. Mon. - Fri.

CONTACT INFORMATION

The following services are available at 1.650.592.8097 Monday - Friday from 6:30 a.m. - 5.00 p.m. PST or via e-mail:

- International Sales (international@jameco.com)
- Customer Service (custservice@jameco.com)
- Credit Department (credit@jameco.com)
- Technical Support (tech@jameco.com)

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Combination 42W Soldering Station and Fume Extractor

- · Input voltage: 100/120VAC @ 60Hz
- Power consumption: 42W @ 650°F (soldering iron)
- · Adjustable knob for temperature control (temperature range:
- 250° to 430°C (500° to 800°F) · Stability@idle: ±5°C (9°F)
- · Maximum air volume: 95/115CFM · Electronic zero-voltage switching
- · LED indicator for pilot light and lighted on-off switch
- · Includes soldering iron, soldering holder, sponge, carbon activated filter, power cord and manual

• Size: 6.4"W x 7.8"H x 4.7"D • Weight: 5.2 lbs.

Part No. Product No. 183169 456DLX\$129.95 \$116.95 \$104.95

JAMECO 6VAC/9VAC Dual Output **Power Transformer**

- Input voltage: 120VAC (black and black wire)
- **Output voltage:** 6VAC @ 500mA center tap (yellow and yellow wire); 9VAC @ 1A center tap (blue and blue wire)
- Wattage: 12VAC
- Size: 2.1"L x 3.2"W x 2.0"H Weight: 1.3 lbs. Part No. Product No.

183089 YS57H-099FAA......\$5.95 \$5.35 \$4.79 Skynet 10 Watt Switching DC

Power Supply · Input voltage:

- 115/230VAC @ 50/60Hz
- · Output voltage: +5VDC @ 2A · Input connector:
- 5-position 3-pin 0.156" male locking headers
- · Mating input conn.: recommend P/N 104723 (pg 61)
- · Output connector: 2-position 0.156" male locking headers UL/CUL/TUV approved
- Mating output conn.: recommend P/N 176743 (pg 61)
- Size: 4.4"L x 1.6"W x 0.8"H · Weight: 0.2 lbs.

Product No. SNP-0502-B...\$9.95 \$8.95 \$7.95 \$6.95 184866

N-Channel Mosfet

- VDSS (drain source voltage) = 500V
- · ID (drain source (continuous) @ $TC = 25^{\circ}C = 8.0A$
- · RDS (static drain source on resistance) $0.85\dot{\Omega}$ (max.)
- · Extremely high dv/dt capability
- · Gate charged minimized
- Case type: TO-220 packaging

Part No. Product No. 10 100 1000 IRF840.....\$.99 \$.89 \$.79

10 Slot Rack for Test Leads

- · Useful for organizing test leads and small tools
- 10 slots
- · Color: black • Size: 11" long
- · Weight: 0.4 lbs.
- 185316 Test lead rack......\$4.95 \$4.49 \$3.95

HEWLETT HP340LX Computer Palm-Top

Windows® CE2.0 Enhanced Version

- Factory refurbished
- Processor: CPU SH-3 RISC 44MHz
- Memory: 4MB on board upgradeable to 10MB (contact HP)
- **QWERTY layout keypad**
- 640 x 240 pixel touch display
- Input/output connectors: compact flash card slot; PC card type II slot; built-in infrared port; audio speaker
- Operating system: Microsoft CE2.0
- Software: Windows CE Services 2.1; Pocket Outlook; Pocket Word; Pocket PowerPoint; Pocket Internet Explorer Inbox; bFAX PRO; Microsoft Excel; Pocket Quicken
- Power: requires 2 AA batteries (recommend P/N 151087, pg 82)
- Size: 7.2"L x 3.5"W x 1.1"H Weight: 1.2 lbs

OILO. 7	.2 L X 0.0 W X 1.111	Worging 1.2 is	
Part No.	Product No.	1	10
183425	HP340LX	\$249.95	\$224.95

HEWLETT® HP360LX Computer Palm-Top

Windows® CE2.0 Enhanced Version

 Processor: CPU SH-3 RISC 66MHz

100

Ground

- Memory: 8MB on board upgradeable to 10MB (contact HP)
- **QWERTY** layout keypad Input/output connectors: compact flash card slot;
- type II card slot; built-in infrared port; audio speaker
- Operating System: Microsoft CE2.0
- 640 x 240 pixel touch display
- Software: Microsoft Windows® CE Services 2.1; Pocket Outlook; Pocket Word; Pocket PowerPoint; Pocket Internet Explorer inbox; Microsoft Excel; Pocket Quicken
- · Power: requires 2 AA batteries (nickel metal hydride)
- Size: 7.2"L x 3.6"W x 1.1"H Weight: 1.3 lbs.

Part No.	Product No. 1	10
183257	HP360LX \$299.95	\$269.95

M HEWLETT® Jornada 420 Palm-Top

Windows® CE2.11

- · Processor: Hitachi SH3 32-bit 100MHz
- Software in ROM: Windows CD2.11; Pocket Outlook; Microsoft Channels Browser; Voice Recorder; Note Taker; JOT (hand writing recognition); bTASK; OmniSolve (business calculator)
- Display: 240 x 320 pixel touch screen
- · Input: pen and touch interface; on-screen keyboard: 4 quick launch icons: quick functions and record buttons
- Memory: 8MB on board
- Card slots: Compact flash type I and II card slot
- External ports: Infrared port; RS232 serial port in cradle
- Sound ports: Audio speaker and microphone; earphone jack
- Power: standard lithium ion battery
- Includes docking cradle with battery charger, serial cable and manual
- Size: 5.2"L x 3.2"W x 1.0"H Weight: 2.8 lbs.

Description **183249** Jornada 420\$349.95 \$314.95

PARALLAX 7

BASIC Stamp 2P Modules

The BASIC Stamp 2 SX Plus (BS2P-IC) has several advantages over all previous BASIC Stamps. Commands for interfacing with parallel LCDs, I²C devices and Dallas Semiconductor One Wire parts have been added along with a polled interrupt capability. Available in a pincompatible format to other BS2

variants, or as a 40-pin module (with 16 extra I/O pins).

- · Voltage: 5-12VDC
- PBASIC commands: 55
- · Program execution speed: 12,000 instructions/sec.
- RAM size: 38 bytes (12 I/O, 26 variable)
- EEPROM program size: 8 x 2K bytes, 4,000 instructions
- Current draw @ 5V: 40mA run/400µA sleep
- PC programming interface: serial port

184911: Size: 1.2"L x 0.6"W x 0.4"H 184920: Size: 2.0"L x 0.6"W x 0.4"H

Part No. Parallax No. 184911 BS2P24-IC**\$78.95** \$71.95 184920 BS2P40-IC 89.95

PARALLAX ₹ Stamp Works Kit

This all-in-one kit takes you beyond theory, into a well-written collection of 32 experiments that will teach you first class BASIC Stamp programming. You'll learn to get the most out of the BASIC Stamp and to increase its versatility by connecting to popular active and passive components.



184911

184920

 Includes manual, BASIC Stamp Experiment Board, BS2-IC, 2x16 parallel LCD with custom cable, digital multimeter with 2 probes, wire cutter/stripper/pliers, three 100' rolls 22 AWG wire, screwdriver kit, photoresistor, 555 timer, 8-bit serial to parallel and 8-bit parallel chips, Dallas Semiconductor 1620 digital thermometer and 1302 real time clock with 32.768 crystal, National Semiconductor ADC0831 8-bit A/D converter, Maxim 7219 8-digit LED display driver, National Semiconductor LM358 op-amp, stepper motor, servo, power supply, resistor assortment, capacitors, serial cable, CD-ROM, and plastic box for parts · Weight: 4.0 lbs.

Parallax No. Part No. 27297\$348.95 \$314.95

200 150 Watt DC to AC Inverters

- · Input voltage: 12VDC High grade thermal
- protection
- Overload protection
- Battery low shutdown · Peak power surge capable 188293:
- · Output voltage: 120VAC
- Size: 5.5"L x 2.6"W x 1.6"H Weight: 1.3 lbs.
- 188285: · Output voltage: 220VAC
- Size: 6.9"L x 4.0"W x 2.2"H
- · Weight: 1.8 lbs.

Part No. Product No. **Output Voltage** 120VAC \$49.95 \$44.95 **188293** G12-015-B2E



188293

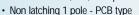


Brand Names You Can Trust

OMRON

G2R Power PCB Relay

- Contact material: AgCdO
 Contact voltage: 250VAC/30VDC
- Operating frequency: 18,000 operations/hour (mechanical); 1,800 operations/hour (electrical; under rated load)
- Service life: 10,000,000 operations (min) (AC); 20,000,000 operations (min) (DC)





G2R-14 Series

G3NA

Series

Part	Product	Coil	Coil	Contact		Pricing		
Number	Number	Volt.	Res. Ω	Current	Pin	1	25	50
186685	G2R-1A-E-DC12	12	275	16A	6	\$3.39	\$2.95	\$2.75

G3NA Solid State Relay

- Pins: 4 · Type: DC/AC
- · Compact dimensions to provide uniform mounting pitch
- Built-in MOV effectively absorbs external surges
- Operation indicator (red LED) enables monitoring operation
- Protective cover for greater safety
 UL/CSA approved

Part	Product	Control	Contact	Contact	Pricing		
Number	Number	Volt (VDC)	Volt (VAC)	Cur (max)	1	25	50
186992	G3NA-210B-DC5-24	5-24	240	10A	\$16.95	\$15.25	\$13.75

G5V Low Signal Relay

- · High sensivity: 150 mW nominal power consumption with 96mW pickup power
- Conforms to FCC part 68 voltage surge
 Low signal
- · Fully sealed construction



Part	Product	Coll	COII	Contact	Pricing		
Number	Number	Voltage	Res. Ω	Current	1	25	
187240	G5V-1-DC5	5	166.7	.5A/1A	\$2.35	\$2.10	

G6 Low Signal Relay

- · High sensitivity can be driven by digital circuits
- · Low profile design allows use in 12.70mm PC board rack
- Surge withstand voltage meets FCC Part 68 regulation
- Can be mounted side by side due to low magnetic leakage
- Contact voltage: 125VAC/30VDC
- Contact form: DPDT
 Dimensions: .80"Lx .40"W x .33"H

Part	Product	Coil	Coil	Contact		Pricing	
Number	Number	Volt	Res. Ω	Current	1	25	50
187282	G6A-234PSTUSDC5	5	125	3A	\$4.69	\$4.19	\$3.75

For our selection of Omron® Products

—See pages 2-4, 48 & 53

Amphenol®

BNC 50Ω Clamp Jack

- For RG-59/U, RG-62/U, RG-71/U, RG-140/U, and RG-210/U
- Impedance: 50Ω Silver plated • Frequency range: 0-4GHz w/ low reflection
- · Inner cable attachment: solder · Outer cable attachment: clamp

Part No. Product No. Description \$1.59 BNC clamp jack......\$2.95 \$2.49 \$1.95 188373 31-15-RFX

BNC 50Ω PCB Receptacles

- Impedance: 50Ω Low profile Silver plated
- Isolated white housing
 Mounting pin type: stamp
- Frequency range: 0-4GHz w/ low reflection
- Vertical printed circuit bulkhead receptacle
- Terminal type: blunt posts for signal and ground

Part No. Product No. Description 188390 31-5486-10RFX BNC PCB receptacle... .\$1.49 \$1.39 \$1.19 \$.95

MicroMate™ (MMCX) PCB Mount

- Impedance: 50Ω Frequency range: DC thru 6GHz
- Temperature range: -40°C thru 90°C
- · Construction: 1 piece contact

Part No. Product No. Description Contact **188550** 908-24100 Right angle jack BeCu\$9.79 \$8.29

See pages 5 & 67 for our selection of Amphenol® Products

entrelec

Systron® Switching Power Supply

- DIN rail mount compact modules
- Low weight
 High efficiency
 Low heating Fused input
- CSA/UL listed, EN50178; VDE 0160
- Input voltage: 90-260VAC/127-260VDC @ 47-63Hz

Part No. Manufacturer No. Output Voltage Output Current **186378** 242341600 24VDC 5A\$249.95 \$224.95 \$199.95

Standard DIN Rail-Mounted Terminal Block

Universal mounting foot snaps onto standard DIN and DIN 2 rail profiles. Terminals are positively retained on rails, but can be removed without disturbing adjacent units.

- Material: molded thermoplastic
 Standard 6mm (0.238") Compression clamp
- 22-12 AWG wire

Part No. Manufacturer No. Material 100 Molded thermoplastic\$1.09 **185914** 011511607

Fuse-Holder Terminal Block

- For use with 5 x 20 fuses
- Din rail-mounted

Customer Number

Compression clamp

Part No. Manufacturer No. **185973** 011565725. \$5.69 \$5.15 \$4.59



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G6A Series

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